English version

Forest Management Standard

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PEFC Danmark

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1. Introduction

This standard is a part of the Danish PEFC certification system for sustainable forest management (in the following referred to as "the Danish scheme").

This standard specifies requirements for sustainable forest management and requirements for planning and documentation under the Danish scheme. The Forest Management Standard is normative for forest owners with intention of getting certified under the Danish scheme.

This version of the standard is a result of the second mandatory review. The first PEFC Denmark's Forest Management Standard was approved by PEFC in 2002 and the first review of the standard was approved in March 2008.

The review of the standard is based on PEFC-DK 001-2 and the experience attained from the practical use of this standard. Furthermore the standard has been revised to ensure compliance with the new demands from PEFC International for sustainable forestry, defined in Sustainable forest management (PEFC ST 1003:2010).

2. Scope

The standard can be used to certify any type or size of forest property in Denmark.

Forest owners can either apply for individual certification of their forest property or through a group (group certification).

The criteria in the standard apply for the following types of areas:

- Forest areas designated as forest reserve land
- Other forested areas
- Open nature areas, which constitute an integrated part of the forest or forest property

The criteria in the standard CANNOT be applied for the following types of areas:

- Agricultural land in rotation
- Gardens, parks and yards belonging to the property

As a basis, all the certifiable area of a property shall be included in the certification.

The owner can choose to excise parts of the property from the certificate. Coherent forest areas under one property cannot be excised. The excised parts shall be explicitly marked on a map. If an owner chooses only to certify parts of the property's certifiable area, further documentation is required for chain of custody.

The standard shall be implemented on the forest property by:

- Individual certification of the forest property, or
- Group certification through membership of a group.

The requirements for certification of groups are described in "PEFC Denmark's requirements for group certification of sustainable forest management - PEFC DK 003-4".

3. References

The Danish Forest Management Standard is based upon:

- Sustainable forest management (PEFC ST 1003:2010)
- Practical experiences gained through the last 5 years use of the Forest Management Standard ver. PEFC-DK 001-2
- New knowledge

4. Definitions

For the purposes of the Danish scheme, the relevant definitions given in "Terms and definitions - PEFC DK 007-2" apply.

5. The forest owner's responsibilities

Certification of a forest property is corroborated in an agreement between the forest owner and the certification body/group leader. The agreement shall be valid for a minimum of one year and a maximum of 3 years.

The forest owner is through the agreement obliged to accept and comply with the following obligations:

- 1) PEFC Denmark's Forest Management Standard
- 2) Relevant legislation and regulation regulating forest management in Denmark. A minimum list of relevant legislation can be seen in annex 1
- 3) To accept control through third-party auditing by a certifying body

The forest owner shall be able to document the ownership of all areas included in the certificate. If this is a matter of dispute, the ownership can be documented through the governmental database OIS or through a land certificate from the Land Registry.

6. General requirements for the forest management

The goal for the Danish PEFC Forest Management Standard is to promote sustainable management of the Danish forests, through certification of forests, with a concern of balancing both the economical, social and ecological aspects in forestry.

For this purpose, the Forest Management Standard of PEFC Denmark is divided into 4 main sections. For each main section is described detailed criteria that certified forests shall comply with.

- 1) A silvicultural section with criteria about i.e. regeneration methods, tree species selection and other aspects closely linked to the wood production of the forest.
- 2) An environment and biodiversity section with criteria about conservation and development of the forests biodiversity, natural amenities, environmental protection, wildlife management together with cultural heritage values.
- 3) A social section with criteria about recreation, dialogue with the local community together with education and rights of the employees.
- 4) A section on planning stipulating requirements about formulating management objectives as well as registration and documentation of operation activities.

Overall the criteria form the basis for long term sustainable management of PEFC certified forests, where a balance between concerns for the stability of the forest, production of wood and other goods, economic viability, environmental protection, biological diversity, landscape and cultural history and social considerations, is secured. Besides that, the criteria and the indicators associated with them, ensure that it is possible to document the sustainable forest management to a qualified forest auditor and in the end the market and the consumer.

As forest owner, one should be aware, that the requirements for the management of the forest as well as the documentation, required by this standard, are more extensive than compliance with Danish legislation would require.

Compliance with the defined criteria for forest management ensures that the goal of the standard is met. In return, it is strived to give as much freedom of choice as possible, to ensure that the standard can have the intended effect and to ensure a sustainable forest management based on the local silvicultural conditions, state and differences in property structure.

The following is a general description of the certified forest management, given to set up the overall frame. The details appear in the individual criterion.

The forest management must be organized in such a way, that a long term, stable forest climate is secured. In relation to this, it is important to ensure significant, future freedom of choice of regeneration methods, to the benefit of both the productivity of the forest and its other functions. The regeneration phase is therefore central in the Forest Management Standard.

By principle, the regeneration of a given stand shall be conducted in a way that does not result in lasting degradation of the forest climate and stability. The standard requires use of regeneration methods that ensures continuous forest cover where it is silviculturally and economically justifiable. Where it is not possible to carry out justifiable self-regeneration other regeneration methods may be used. As part of this, clear cutting may be used at the certified property as long as the use follows the requirements given in this standard. The standard requires a quick reestablishment of a forest climate after clear cuttings. It also requires that the forest owner after carrying out clear cutting unambiguously improves the future stability of the forest and flexibility of the future forest management.

There are certain frames for the choice of tree species in certified forests. To create a variation in the future supply of wood and in habitats for animals and plants, together with a stable and resistant forest, a structure with different tree species and ages must be developed for certified forest. The standard sets up specific measurable targets, assessed on the basis of proportion in mixtures, to promote indigenous species on respectively poor and better soils. The purpose is to secure the flora and fauna that has been adapted to these tree species. By utilizing the ratio of mixtures, the standard takes into account in an explicit fashion, challenges present in the Western Jutland. Similarly other bush and tree species must be promoted during improvement cuts and thinning, where it is economically justifiable and where the species can form part in the future stand structure. As example, natural regeneration appearing in gaps in the stand shall be left and incorporated in the stand.

It is possible to use 10 % of the forested area to intensive management uses (e.g. Christmas trees and greenery). The standard sets up requirements for establishment of new intensively managed areas and for the use of fertilizers and pesticides.

Outside the intensively managed areas, the use of fertilizers shall be out-phased and the use of pesticides shall be minimized. The standard specifies conditions for use of pesticides through specific criteria.

The standard contains a set of criteria that shall ensure the protection and promotion of a number of environmental services, among these biodiversity, in the forest management. It applies to protection of particularly vulnerable areas, establishment and preservation of stable forest fringes with a high content of indigenous tree and bush species and especially the increase in the amount of dead wood and old trees and protection of existing, characteristic old trees.

The standard introduces biodiversity areas, which are a central part of this standard. 7.5 % of the certified area shall be designated as biodiversity areas. The areas shall be found in areas with special biological values or with the potential to develop such values. A biodiversity area might encompass everything from untouched forest to light open nature types with continuous management activities. The standard defines criteria for which areas that can or shall be included while considering the conditions at the individual property.

The standard also focuses on the forestry employees and the interaction with the surroundings in general. In relation to this, good conditions for employees shall be ensured and training for the employees is required together with the requirement of knowledge about the Forest Management Standard. The forests' provision of recreational experiences to the public constitutes a significant contribution to the social welfare. This function is strengthened through dialog with the surrounding community and ensuring good accessibility and recreational opportunities in the certified forests.

Finally the standard contains a number of requirements for registration and documentation. This is the basis for a correct and simple audit of the forest management and ensures a high credibility and quality for any PEFC certification.

7. Criteria and indicators for sustainable forest management

This section defines the criteria for sustainable forest management in Denmark. The criteria have been grouped in the following 4 subsections:

- 1. Silviculture
- 2. Environment and biodiversity
- 3. Social
- 4. Management planning

The structure of the criteria is:

X. – The general grouping of the criteria (section).

X.1 – The criteria for sustainable forest management defined by PEFC Denmark.

I X.1.1 – Indicators and/or verifiers relating to the above stated criterion.

1. Silviculture

Forestry in general:

- 1.1. The forest management shall be structured to protect and improve the forest resources, including the ability of the forest to produce a broad variety of forest products and other services of value in the long perspective, with respect towards the different use and functions of the forest area.
 - I 1.1.1. Evaluation of the owner's policy and objective.
- 1.2. The long term, stable forest climate of the forest shall be maintained and continuously improved. Fundamentally the silviculture shall therefore ensure creation of a larger freedom in choice of future regeneration methods. This shall be done in the following ways:
 - Retaining sufficient stocking density on the property's forest covered area.
 - Use of forest regeneration systems, which quickly and safely establishes a useful regeneration. This does not prevent the use of natural succession at suitable locations.
 - Use of forest regeneration systems, which will ensure permanent canopy cover, where this is silviculturally possible and is assessed economically justifiable.
 - Where it is not possible in a justifiable way to use forest regeneration methods that ensures a continued cover, clear cutting may be used.
 - Clear cuts shall have a shape and sizes that ensure a quick restocking and that the forest climate and the stability of the surrounding stand are not compromised, when carried out. Clear cuts shall not be used where a biologically rich nature is characterised by continuity in forest cover and/or stable hydrology. Especially the size and use of clear cuts shall be justifiable.
 - The structure, size and tree species composition of the restocked area shall be adjusted according to the extent and structure of the forest, so as to ensure a good possibility for achieving a stable forest climate and future balanced logging cycles. Considerations must also be shown towards nature and culture values when planting. Restocking must take place within 3 growth seasons.

This does not prevent establishment and management of open nature areas, areas with coppiced forests, silvopasture and intensive land management and other unconventional woodland practises as long as it come within the scope of the forest act and its exemption possibilities.

I 1.2.1. The use of natural regeneration and other regeneration methods that ensure a continuous forest cover is to be evaluated and justified based on the planting records.

- I 1.2.2. The use of clear cutting is evaluated on the basis of inspection of newly regenerated areas and justified based on the planting records.
- I 1.2.3. Evaluation of the balance between harvest and increment.
- I 1.2.4. Evaluation of the planting records compared with the tree species composition on the property.
- 1.3. The rate of harvest both wood and non-wood forest products must happen in a way that does not affect the long term productivity capacity of the site. For the production of wood, this is secured through compliance with the other requirements stipulated in this standard. If non-wood products from the forest are to be utilized commercially, the owner shall establish guidelines for the management to secure it does not affect the long term production capacity of the site.
 - I 1.3.1. Evaluation of guidelines for use of non-wood products from the forest, if such a production takes place.
- 1.4. Intensive management systems may take place at maximum of 10 % of the property's forested area. It is allowed to have intensive management regimes at up to 15 % of the property's forested area until 10 years after the standard has come into force (for existing certificates) or 10 years from the first issue of a certificate. This means, that the intensive management at maximum is allowed to take place on10 % of the forested area after 10 years from the standard has come into force (for existing certificates) or from date of first certification. If needed, a plan for reducing the intensive managed area to a maximum of 10% shall be in place before the end of the certificate's first period of validity. The production from the intensively managed areas cannot be sold as PEFC certified. However wood production from Christmas tree and Greenery areas will be considered as ordinary management operations and the wood production from these can therefore be sold as PEFC certified.
 - I 1.4.1. The area with intensive management systems does not exceed 10 % of the property's forested area, though under consideration of I.1.4.2.
 - I 1.4.2. If between 10% and 15% of the property's forested area is under intensive management, a plan for reducing this area to a maximum of 10% within 10 years after the standard comes into force for valid certificates or first certification, respectively, shall be in place.
- 1.5. The intensively managed areas must be developed in a nature and environmentally friendly way, so that:
 - The use of pesticides and fertilizer is minimal and environmentally responsible.
 - When locating new intensively managed areas, § 3 areas (listed in § 3 of the Nature Protection Act) and other valuable nature shall be respected.
 - Restocking or establishment of new intensively managed areas are not allowed closer than 10 meters from §3 areas and streams.
 - The use of pesticides listed as WHO Type 1A and 1B pesticides, chlorinated hydrocarbons and other very toxic pesticides, whose derivates remain biologically active beyond their intended use, and other pesticides banned by international agreement¹, are prohibited.
 - I 1.5.1. Assessment of whether the use of fertilizers on intensively managed areas is minimized is done on the basis of the fertilizer plan.
 - I 1.5.2. Assessment of whether the use of pesticides on intensively managed areas is minimized is done on the basis of the pesticide application plan.
 - I 1.5.3. Evaluation of used active ingredients.
 - I 1.5.4. Evaluation of the location of new intensively managed areas.
- 1.6. On the areas not intensively managed the use of fertilizers must be out-phased through adjustment of the cultivation systems so that:
 - The use of fertilizers outside the intensively managed areas does not occur, where special nature elements depend on the area being in an oligotrophic state.
 - Fertilizers may only be applied in relation to establishment of a culture on oligotrophic locations, where conifers are to be converted into broad leaf areas and where it is critical

¹ Link to the Stockholm Convention of 2001 on persistent organic pollutants and other organic pollutants: http://www.pops.int/documents/pops/default.htm

- for the establishment. The contribution of nutrients from the surrounding atmosphere shall be included as a factor for the decision making.
- The cultivation system is adjusted so that fertilizer (or recycling of ash) does not have to be used. Exemption from this must be covered by a statement from an expert.
 - I 1.6.1. Evaluation of use of fertilizer on the property is done on the basis of information in the fertilizing plan.
 - I 1.6.2. Evaluation of the expert statement, if such is present.
- 1.7. On the areas not intensively managed, the use of pesticides (including rodenticides) shall be minimized. Appropriate silvicultural alternatives and other biological measures are to be preferred to the use of chemical pesticides (including rodenticides). The following applies where pesticides are used:
 - Vegetation that threatens the establishment of a useful regeneration can exceptionally be controlled through use of pesticides.
 - Use of soil and hormonal agents is not allowed.
 - Pesticides can exceptionally be used to control invasive species and pests, where a welldocumented need is present.
 - Where pesticides (including rodenticides) are applied, the use is minimal and environmentally responsible and shall be motivated.
 - The use of pesticides listed as WHO Type 1A and 1B pesticides, chlorinated hydrocarbons and other very toxic pesticides, whose derivates remain biologically active beyond their intended use, and other pesticides banned by international agreement², are prohibited.
 - I 1.7.1. Evaluation of the use of pesticides on the property is made on the basis of the pesticide application plan seen against the planting records and reason given for the usage.
- 1.8. Soil scarification on areas not intensively managed must be limited with respect to the effect on fungi, flora and fauna, so that:
 - Shallow soil scarification may be carried out on maximum 70 % of the area for regeneration, where this is necessary for ensuring the regeneration or a change in tree species. It is done in a way that secure untreated areas around seed trees, along forest fringes, on wet areas and other biological valuable habitats.
 - Deep soil preparation may only be carried out sporadically or in rows.
 - Sporadic and line treatments may only be carried out with an intensity that normal plant spacing would require.
 - Removal of stumps and deep grounded ploughing is not allowed.
 - A reason for the choice of method shall be possible to present.
 - I 1.8.1. Records accounting for the choice of method for the part of areas under tillage, c.f. the planting records.
 - I 1.8.2. Evaluation of reason given for choice of method.
 - I 1.8.3. Shallow soil scarification has not been carried out on more than 70 % of the total area of the site.

Tree species selection:

- 1.9. Use of native species shall be promoted in a way that the forested area of the property ultimately will consist of at least 20 % and 55 % of native species, respectively at poor and better soils. The percentages are determined based on the recorded mixture ratios of the species.
 - I 1.9.1. Increased use of native species up to at least 20 % at poor soils and up to at least 55 % at better soils.
 - I 1.9.2. Evaluation of planting records.
- 1.10. Exotic species may only be used where they do not threaten significant natural values and are locally adapted. Conversion of the following areas are not allowed:
 - Stands with an age that significantly exceed normal rotation age for the species and/or

² Link to the Stockholm Convention of 2001 on persistent organic pollutants and other organic pollutants: http://www.pops.int/documents/pops/default.htm

- Stands with a biological rich nature associated with continuity in forest cover and/or stable hydrology and
- Areas with native tree species that can act as buffer-zones or can connect stands mentioned under the two previous points.

If areas with native species are converted to areas with exotic species, a mapping of areas that are not allowed to be converted from native to exotic species shall be carried out beforehand.

- I 1.10.1. Evaluation of use of exotic species from the planting records and designation of areas that are not to be converted.
- 1.11. Use of genetically modified plants is prohibited. Clones are not allowed as the main tree species at more than 5 % of the forested area.
 - I 1.11.1. Evaluation of used plant material from the planting records.

2. Environment and biodiversity

Biodiversity and nature value:

- 2.1. The structure in the forest shall be developed in a way that it contains different tree species at different ages, to create a variation in habitats and a stable and robust forest. Other tree and bush species than the main species must be promoted under cleaning and thinning operations, where this is economically justifiable and where these with advantage can become part of the stand structure.
 - I 2.1.1. Evaluation of the promotion of other tree species than the main species is done where appropriate.
 - I 2.1.2. Evaluation of the distribution of tree species and age classes by means of the compartment list.
 - I 2.1.3. Evaluation of whether the choice of tree species is balanced with any existing soil analyses Forest soil mapping or other soil analyses.
- 2.2. Coppicing and other old forest management systems of particular cultural, historical, biological value, or value for the landscape, shall be preserved in a way that the mentioned values are maintained or promoted. Older types of woodland operations include coppiced forests, grazing forests, cut or grazed forest meadow, protected oak thickets or selective felling.
 - I 2.2.1. Evaluation of the state of coppiced forests and other areas with old forest management systems.
- 2.3. The silviculture shall contribute to a continuous recruitment of big, old trees and dead wood in the forest to accommodate the biological diversity. When regeneration cuttings are carried out, at least 5 trees or approximately 10 m³ wood on the stump per ha shall be retained in the production forest for natural decay and death and decay (nesting trees, hollow trees and dead wood). The selection of these trees must be made in a way that these eternity trees are chosen from long term, stable species and typically from the group of standards. The eternity trees may be clustered in one or more groups in the stand. The eternity trees may be replaced by 5 snags if appropriate stable individuals are not present. In middle aged and older stands, at least 3 snags (as high as possible) or at least 3 lying trees in total per ha shall be retained. Beside of that, existing veteran trees and lying trees undergoing a natural decay shall be retained and protected.
 - I 2.3.1. Minimum 5 trees or minimum 10 m³ wood on the stump per ha, have been left for natural death and decay in managed forest.
 - I 2.3.2. In middle aged and older stands minimum 3 snags or 3 lying trees in all are left per ha.
 - I 2.3.3. Existing veteran trees and lying trees undergoing a natural decay are retained and protected.
- 2.4. A minimum of 7.5 % of the total certified area of the property shall be designated as biodiversity area, including untouched forest. Biodiversity areas must primarily be laid out where:

- The conservation of unique biological values requires that the area is left untouched or maintained if this is necessary to preserve or promote the natural values.
- Where biodiversity areas, including untouched forest, supports networks (e.g. corridors) in the landscape.
- Where it is to be considered feasible based on an overall ecological, economic and social assessment.

The biodiversity areas can not only consist of light open nature types. Where there at the time of certification exist areas with untouched forest or biologically particular valuable forest with very long continuity, these areas shall be preserved and designated and form part of the 7.5 %. Units that once have been designated as untouched forest cannot be replaced by another management system.

- I 2.4.1. Evaluation of whether the areas have been designated after the guidelines and are managed after the maintenance plan.
- I 2.4.2. Biodiversity areas, including areas with untouched forest, comprise at least 7.5 % of the total certified area.
- I 2.4.3. Areas where there at the time of certification are untouched forest or unusually old forest, these are included in the 7.5 % designated areas.
- 2.5. Stable forest fringes with a high proportion of native tree and bush species shall be maintained and developed. Where these are not to be found, they shall be established when the stand is regenerated.
 - I 2.5.1. Inner and outer forest fringes have been maintained and are considered through the management.
 - I 2.5.2. Forest fringes are established along inner and outer boundaries.
- 2.6. Characteristic old trees shall be retained. Under planning and operations in the stands these trees must be ensured sufficiently influx of light.
 - I 2.6.1. Characteristic, old trees have been retained and a sufficient influx of light is ensured when cultivations are carried out in the surrounding area.
- 2.7. Rare indigenous species, including red listed³ species, shall be protected or promoted and are not allowed to be used commercially.
 - I 2.7.1. Registrations of natural values are in place and are considered through the management.
- 2.8. Activities impacting negatively on particularly vulnerable areas and species should be regulated.
 - I 2.8.1. Registrations of natural values are in place and are considered through the regulation of straining activities.
- 2.9. Lakes, ponds, streams, bogs, heath lands, coastal meadows or marshes, water meadows and commons associated with the forest, where the hydrology has been altered through draining or other interventions, shall to the extent possible be re-established to their original state, taking into consideration the economic consequences, hereunder the stability of the neighboring stands. An increase of the area of these nature types should take place in each 5 year period, if there is a potential for this. Drainage of areas not previously drained is not allowed.
 - I 2.9.1. Evaluation of draining activities carried out.
 - I 2.9.2. Evaluation of the development of the nature types.

Environmental protection:

2.10. Logging, transport and regeneration techniques which spare/protect the site and the stand shall be applied to ensure favorable soil conditions. Transport in the forest is carried out in a way that minimizes damages. Particularly significant damages caused by use of machinery shall be avoided through amongst other things, choice of machinery adapted to the locality and/or permanent skidding tracks and the timing of operations.

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http://www.naturstyrelsen.dk/Naturbeskyttelse/National_naturbeskyttelse/Arter/Roedlisten/

³ Red Listed species:

- Evaluation of used logging, transport and regeneration techniques. I 2.10.1.
- I 2.10.2. Evaluation of use and location of skidding tracks, if these are present.
- The spillage of oil and other substances harmful to the environment, through forest management operations or the indiscriminate disposal of waste on forestland, shall be strictly avoided.
 - Evaluation of the extent of spillage of oil and other substances harmful to the I 2.11.1. environment and disposal of waste in the forest.
- 2.12. Invasive species 4 shall be controlled where it is economically and practically possible and especially at the areas designated as biodiversity areas, hereunder untouched forest. The forest owner shall be familiar with the "black list" 5 and introduction of species on this list is not allowed.
 - I 2.12.1. Evaluation of the effort against invasive species.
- Forest fires shall be avoided. Fires might however be used when they are a part of the nature management and necessary to achieve defined objectives. Fire protection plans are recommended and firebreaks should be established at vulnerable sites.
 - Fire protection plans exist, where it is relevant.

Wildlife management:

- 2.14. Fencing in the forest shall be used in a way that does not block or hinder the passage of wildlife. After use the fences shall be taken down.
 - Evaluation of fencing practice. I 2.14.1.
- 2.15. Wildlife management shall comply with the principles of multiple management use. This also applies to selection of locally adapted tree species and the possibilities for natural regeneration.
 - Evaluation of the wildlife's influence on the regeneration possibilities.
- Feeding crops shall be grown where specific wildlife management reasons support it. Feeding 2.16. crops must not be located at areas with protected nature types. Feeding crops depending of continuous input of fertilizer and/or use of pesticide or which is relocated regularly (at most each 5th year) is to be counted as a part of the intensively managed area.
 - I 2.16.1. Evaluation of the locations of the feeding crops.

3. Social – recreation, education and the rights of employees

Recreation:

- Opportunities for outdoor recreation and nature experience in the forest shall be ensured by i.a. 3.1. easy access, including the maintenance and establishment of roads and pathways, clearing of scenic views and possibly designation of sites of particular recreational value.
 - I 3.1.1. Registrations of the access opportunities to the forest, existing roads and bigger paths and special facilities for the outdoor recreation, have been fulfilled.
 - I 3.1.2. Evaluation of the opportunities for recreation and nature experience.
 - I 3.1.3. Due regard have been paid to the outdoor life if the infrastructure is rearranged.
- 3.2. Information about possibilities of access and recreation in the forest shall be easily accessible for the public.
 - I 3.2.1. Information about access and possibility for recreation is easily accessible.
- 3.3. The forest owner and his employees shall be ready to enter into a dialogue with users and the local community aiming i.e. at ensuring a reasonable:

⁴ Invasive species: http://www.naturstyrelsen.dk/Naturbeskyttelse/invasivearter/

⁵ The black list: http://www.naturstyrelsen.dk/Naturbeskyttelse/invasivearter/Arter/Sortlisten/

- Planning and exerting of recreation in the forest.
- Utilization of knowledge about the natural and cultural history of the forest.
 - I 3.3.1. Records of arrangements, excursions, meetings, and written enquiries from users and other external parties etc. are done.

Landscape and cultural history:

- 3.4. Due regard in management shall be paid to historic and cultural heritage sites and the forest management shall ensure that these sites are preserved.
 - I 3.4.1. Registrations of historic sites and relics of the past have been fulfilled and are used in the planning.
- 3.5. Particular landscape features and functions of the forest e.g. characteristic trees and scenic views shall continuously be maintained and improved.
 - I 3.5.1. Due regard in the management planning have been paid to landscape esthetic features and functions.
- 3.6. The owner of the forest shall supervise and monitor forest management activities and shall ensure that employees carry out their tasks in a safe and qualified manner in compliance with current guidelines for forest management and relevant legislation, including legislation about health and safety at work. The forest owner should continuously ensure that employees get the necessary supplementary training to carry out a sustainable management.
 - I 3.6.1. Documentation for education of employees in connection with sustainable forest management has been prepared.
 - I 3.6.2. Evaluation of the forest owner's supervision and monitoring of the forest management.
 - I 3.6.3. Documentation for accomplished supplementary training of relevance for the Forest Management Standard.
- 3.7. The use of pesticides, including rodenticides, shall follow the instructions given by the pesticide producer and be implemented with proper equipment and training.
 - I 3.7.1. The use of pesticides follows the instructions from the pesticide producer and is carried out with use of proper equipment.
 - I 3.7.2. Documentation must be present for the proper education of the people applying pesticides.
- 3.8. The forest owner shall in connection with the operations ensure that the tasks performed by the employees and specialized machine operators are carried out in compliance with the requirements for sustainable forest management. This is ensured through the employees' and specialized machine operators' awareness of and compliance with the parts of the policy and objectives relevant for the task. Further the employees and specialized machine operators must have access to the written documentation, including registrations of the nature, culture and recreational values, relevant for the performance of task. Beside of that, they shall always possess the knowledge relevant for the task. The owner shall in connection to this ensure that the specialized machine operator possess the competences listed in annex 2 as a minimum.
 - I 3.8.1. Owner, permanent forest staff and specialized machine operators demonstrate a general knowledge about the PEFC Forest Management Standard and the thereof deflected considerations regarding the forest management relevant for their individual positions.
 - I 3.8.2. Employees and specialized machine operators have knowledge about and access to the written documentation.
 - I 3.8.3. Evaluation of specialized machine operators' competences based on the specifications in annex 2.
- 3.9. Other contractors and users of the forest, e.g. hunters, firewood collectors, organizers of recreational activities etc., shall have specific information about protections and designations if it is assessed that the different values are possibly to be affected by the activity. E.g. a wood collector cutting wood in a middle aged stand must be able to demonstrate knowledge relevant for the stand in concern, so as protection of a historic relic or valuable nature.

- I 3.9.1. Contractors and forest users have received relevant information about protections and designations and demonstrate knowledge about the relevant elements.
- 3.10. The forest owner shall at a reasonable degree be willing to host areas and offer knowledge to research activities and data collection when approached by research institutions.

Rights of employees:

3.11. All collective agreements shall be respected for all employees, this counts for permanent staff, hourly-paid workers, temporary workers, seasonal worker etc.. The forest management shall be carried out in respect of the ILO Conventions on workers' rights, safety and health.

ILO's core conventions:

- No. 29: Forced Labour, 1930
- No. 87: Freedom of Associations and Protection of the Right to Organise, 1948
- No. 98: Right to Organise and Collective Bargaining, 1949
- No. 100: Equal Remuneration. 1951
- No. 105: Abolition of Forced Labour, 1957
- No. 111: Discrimination (Employment and Occupation), 1958
- No. 138: Minimum Age for Admission to Employment, 1973
- No. 182: Worst Forms of Child Labour, 1999

All the conventions have been ratified in Denmark.

Beside of these:

- No. 169: Indigenous and Tribal Peoples Convention, 1989
- No. 184: Safety and health in agriculture (covers also forestry)
- ILO Code of Good Practice: Safety and Health in Forestry Work
 - I 3.11.1. All collective agreements have been respected in regard to all employees.
 - I 3.11.2. The forest management is carried out in respect for ILO core conventions 29, 87, 98, 100, 105, 111, 138, 182, 169, 184 and ILO Code of Good Practice: Safety and Health in Forestry Work.

4. Management planning

A system for forest management planning for the forest property shall be established and maintained as described in the following. The section is divided into the following sub-sections:

- Management objectives
- Preliminary registrations
- Continuous registrations
- Sale of certified wood
- Chain of Custody (only for a partly-certified forest property)
- 4.1. The forest owner shall define an objective for the sustainable forest management which is in accordance with the Forest Management Standard.

The objective shall contain:

- An overall objective for the forest property
- All essential intermediate objectives and policies for the forest management

Preliminary registrations:

4.2. A number of registrations shall be carried out preliminary to the certification of the property. The registrations shall be updated regularly and at least for every 10 years period. The written documentation for the forest property shall be available for the certification body conducting the audit. The documentation can be either an IT based management system, an existing management plan, a green management plan or similar. The written documentation shall include the following:

- a) Objectives for the forest management.
- b) The written procedures for controlling all documents and registrations required by this standard to ensure that:
 - They can be located;
 - They are periodically reviewed, revised as necessary and approved for adequacy by authorized personnel;
 - The current version of relevant documents is available at all locations where operations essential to the effective functioning of the management system are performed;
 - Obsolete documents are promptly removed from all points of issue and points of use or otherwise assured against unintended use.

Procedures and responsibility shall be established and maintained concerning the creation and modification of the various types of documents.

- c) A written procedure for the forest owner's yearly evaluation of the forest management relating to the defined policy and objectives, including descriptions of recorded deviations in relation to the standard.
- d) Forest maps showing certified areas. Requirements for the forest map:
 - The delineation of the certified area shall be identified on the map.
 - The map shall be produced in a scale of 1:4000-1:10000.
 - The map should include the inner delineation of the forest into forest types or stands (including areas with special natural values), the roads and passages.
 The individual compartments is to be numbered e.g. after the compartment/ sub-compartment system.
 - Each compartment is to be described at least with the following data:
 - o Size
 - Main species
 - Extent of important mixed species description and percentage composition of species if stand is mixed
 - Age or year of establishment (may be based on professional judgement)
 - Land use of areas without tree cover

There are no further requirements to the form of the map. E.g. there is no requirement of digitizing the map. The forest map can be in the form of a handmade drawing on a true aerial photography.

- e) Registrations relating to map of:
 - Designated biodiversity areas, including untouched forest.
 - Registered conservation areas and § 3 protection areas of the Nature Protection Act registered by the authorities.

- Other natural values. E.g. areas with a high biodiversity or with rare plants and/or animals, untouched forest, areas with old management practises, § 3 areas not registered by the authorities and areas of a significant size protected by § 28 in accordance to the Forest Act. Can be a 'registration of key woodland habitats, an assessment of natural values' or the owners own registration of the natural values at the property.
- Areas with native species not allowed for conversion to introduced species, cf. criterion 1.10, if relevant.
- Historic sites and relics registered by the authorities.
- Access possibilities to the forest (roads and paths) and special installations for outdoor recreation (can be fire places, primitive campsites, forest playgrounds, vantage points, parking areas etc.).
- Areas allocated to intensive management practice.
- f) A maintenance plan for the biodiversity areas containing at least:
 - The objective with the designated area
 - The time horizon
 - Elements of concern for protection
 - Necessary actions for maintenance
- g) Guidelines for use of non-wood products from the forest, if relevant cf. criterion 1.3.

Continuous registrations:

- 4.3. Documented management records unambiguously referring to the divisions at the forest map:
 - a) Planting records containing:
 - a. Size of the area
 - b. Year (of establishment)
 - c. Planting method including soil preparation and fencing if any
 - d. Tree species / provenances
 - e. Former tree species
 - b) Yearly consumption of pesticide at property level with a registration of the locations that has received the treatment. application records
 - c) Yearly consumption of fertilizer at property level with a registration of the locations that has received the treatment. application records
 - d) Yearly harvest of wood at the certified area.
- 4.4. Registrations of conducted events, excursions, meetings and written enquiries from users and other external interests etc.

Sale of certified wood:

4.5. The forest owner decides whether the products from the certified area are sold as certified or not.

The forest owner must actively sell the wood as certified before the buyer (whether a sawmill,

timber trader or other) may count the wood as certified under their chain of custody certification, cf. PEFC's chain of custody standard PEFC 2002:2010 - appendix 1.

- 4.6. Products from the forest sold as certified, shall for each delivery be followed by documents (either the invoice, delivery note or measuring list) which include at least the following information,:
 - The name of the forest, as it is stated at certificate
 - Identification of products covered by the delivery
 - Quantity of delivered products
 - Date or period of delivery
 - Formal declaration that the product is certified
 - Number of certificate and if relevant logo license number

Chain of custody (only for certifications of part of a property):

- 4.7. Forest owners that choose only to certify a part of the forest property shall document chain of custody for products sold as PEFC certified. As a minimum the following shall be documented:
 - a) The forest owner shall ensure that the certified raw material is separated or clearly identifiable at all stages of the production or trading process.
 - b) The buyer is at the point of sale or transfer of the certified products provided with a document verifying compliance with the chain of custody requirements.
 - c) The forest owner shall ensure that all delivery documentation of the certified products for each delivery through either the invoice, delivery note or measuring list clearly states at least the following information:
 - The name of the forest, as it is registered at certificate
 - Identification of products covered by the delivery
 - Quantity of delivered products
 - Date or period of delivery
 - Formal declaration that the product is certified
 - Number of certificate and if relevant logo license number
 - d) A member of the management who, irrespective of other responsibilities, is appointed to have overall responsibility and authority for the chain of custody.
 - e) The forest owner shall establish and maintain records of all sold forest based raw material including information on its origin to provide evidence of conformity with the requirements and its effectiveness and efficiency. The forest owner shall maintain the records for a minimum period of five years.

Annex 1 - Relevant Danish legislation

Not translated to English

The links refers to www.retsinfo.dk

Bekendtgørelse om anvendelse af affald til jordbrugsformål - Slambekendtgørelsen

Bekendtgørelse om handel med forstligt formeringsmateriale

Bekendtgørelse af museumsloven

Ferielov - Ferieloven

Lov om arbejdsmiljø – Arbejdsmiljøloven

Lov om arbejdsret og faglige voldgiftsretter

Lov om bygningsfredning og bevaring af bygninger

Lov om jagt og vildtforvaltning – Jagt- og vildtforvatningsloven

Lov om journal over brug af plantebeskyttelsesmidler og eftersyn af udstyr til udbringning af

plantebeskyttelsesmidler i jordbruget

Lov om kemiske stoffer og produkter - Kemikalieloven

Lov om miljø og genteknologi – Miljø- og genteknologiloven

Lov om miljøbeskyttelse – Miljøbeskyttelsesloven

Lov om miljømål - Miljømålsloven

Lov om miljøvurdering af planer og programmer

Lov om naturbeskyttelse - Naturbeskyttelsesloven

Lov om okker - Okkerloven

Lov om planlægning – Planloven

Lov om Planteskadegørere

Lov om råstoffer - Råstofloven

Lov om skove - Skovloven

Lov om vandløb - Vandløbsloven

And Skatte og afgiftslovgivningen relevant for the individual property type

Annex 2 – Requirements for competences of machine operators operating in PEFC certified forests in Denmark.

The operators of big specialized machines used for operations concerning cutting, chipping and extraction of wood, soil preparation, spraying, fertilizing and maintenance of drainage in a PEFC certified forest, must have the following competences:

- General knowledge about the certification concept what does having a PEFC certification entail for a forest property?
- General knowledge about the legislative frames.

The operator of specialized machinery must in accordance with criterion 3.6 possess the knowledge and information about sustainable forest management and environmental considerations in the forest management relevant for the task. The machine operator's knowledge shall include:

- a) Knowledge about different regeneration principles and the practical handling in relation to sustainable management, including:
 - I. ensuring stability when clear cutting is used,
 - II. retainment of trees for natural decay when thinning and regenerating,
 - III. retainment of natural growth,
 - IV. limited and gentle use of soil preparation,
 - V. promotion of other tree species than the main tree species
- b) Knowledge about the maintenance of the structure of the forest, including:
 - I. retention of characteristic old trees and veteran trees,
 - II. retention and protection of deadwood,
 - III. designation of areas for biodiversity, including untouched forest,
 - IV. maintenance of outer and inner forest fringes
- c) Knowledge about operational methods, including:
 - I. the impact of operational methods on sustainable management,
 - considerate driving in stands, including creation of tracks and possibly establishment of permanent skidding tracks.
 - III. adjusted use of fertilizers and pesticides.
 - IV. handling of machinery leakages
- d) Knowledge about forestry's handling of nature values, wildlife, recreation, cultural history and other interests, including:
 - I. knowledge about natural amenities / key biotopes,
 - II. protection of vulnerable areas,
 - III. considerations for the hydrological conditions of the forest,
 - IV. considerations about historical sites and relics,
 - V. considerations for visitors and recreation