

# Belgium

## FSC-Criteria for sustainable forest management: public consultation

### Why a public consultation?

Below you will find a set of criteria for sustainable forest management which has been compiled by various groups spanning several years. These criteria will be used for FSC certification of forests in Belgium. This means that a forest manager who so wishes - the system works on a voluntary basis- can have his forest management checked by an FSC accredited institution. If his management meets the specified criteria, the products made of wood originating from his forest can have a FSC-label on them. ( However, it is necessary for any processors of the wood to have had a check/control so that the wood can be traced through the production apparatus. This aspect does not make up any part of the criteria which follows.)

The intention of the public consultation is to give everyone a chance to look at the criteria and to be able to furnish comments on the text. All comments received will be grouped together and will be discussed at a FSC-working group meeting. Hereafter, these criteria, which will include the changes that were accepted, will be sent on to FSC-International in Mexico. If FSC-International accepts these criteria, they will become obligatory for every certification in Belgium.

### Short historical overview

Spurred on by WWF-Belgium a FSC-working group was set up in 1994 to formulate Belgium FSC-criteria for sustainable forest management. This working group underwent quite a few twists and turns. In the spring of '98 nearly all the criteria were completed by the FSC-working group, with the exception of a few minor points, and we would like to take this opportunity to thank everyone who has worked on these criteria for their input ( the list of all the present members of the FSC-working group can be found in the annex).

In March of '98, after a resolution, presented by Vera Dura, was unanimously approved by the Flemish Parliament, a new negotiating process was launched at the Flemish level, within the MiNaraad, whereby the Belgium working group's FSC-criteria served as an important input. This new deliberation had the advantage that it could provide a chance to come to an agreement with the Flemish private forest owners, which would give broader support to the criteria and increase the chances of implementation.\*

For that reason and because the most important parts of the FSC-criteria can be found in the text, the FSC-working group decided to use as FSC-criteria the same criteria as the MINA-raad working group for the public consultation process. The FSC-working group believes that when the text is taken in its entirety, it is an acceptable compromise, and when applied in practice will lead to a real improvement in forest management.

### The practicalities of the public consultation

The text of the criteria is freely available to everyone, in English, Dutch and French. Please ensure that the language in which you make your comments, is the same as the version of the text you have read. Please try to ensure that your comments are as practical as possible. Comments such as "the criteria are too weak", without stating what should be changed in the text, will be very difficult to handle by the FSC-working group. Therefore try to refer exactly to the text you wish to see replaced and then state by what it should be replaced.

For Flanders the public consultation will be carried out by the Educatief Bosbouwcentrum Groendaal, where you can receive a comment sheet from ir. Bart Van der Aa: tel: 02/657.93.64 fax: 02/657.57.54

For Wallonia, Brussels and abroad, you can send you comments to the Belgium FSC- contact person/ir. G. Lejeune, WWF, Waterlooosteenweg 608, 1050 Brussels, tel: +32.2.3400955, fax: 32.2.340.09.38, Email: geert.lejeune@wwf.be

### Comments will be accepted if received before 15/11/98

\* The aims of the MiNaraad-criteria are twofold: 1) that the government will use these criteria as a base for its forestry policy, for both the management of its own forests as well as for private forest owners 2) that these criteria will be "good enough" so that anyone who wishes can also be recognised by an internationally operating certification institution (read FSC). This parallel system creates the possibility to arrive at a system whereby a private owner can be helped by the government to implement the criteria, and the control that the government is already carrying out for the allocation of subsidies can be integrated into the official FSC-system, whereby the costs of certification could be lowered.

## FSC CRITERIA FOR SUSTAINABLE FOREST MANAGEMENT

### 1. *Organisation, structure and evaluation of the criteria.*

The criteria are organised on the basis of the different perspectives on sustainable development. The first group of sustainability criteria emphasises the socio-cultural functions of forests. Criteria such as the observation of existing regulations, attention to the recreational, cultural and historical elements, and the development of training and health and safety provisions are elaborated in greater detail. The criteria regarding the productive functions of forests fall in the second group. These criteria concern, inter alia, forest maintenance and the quality of the site, the capacity for natural regeneration, and forms of forest management and exploitation. The criteria concerning the environment are relatively extensive. They are further subdivided, on the one hand, with regard to limiting environmental pollution: acidification, fertilisation, spread, removal etc., and on the other hand, the promotion of biological diversity in forest ecosystems. The environment comprises not only, the atmosphere, soil and water, but also the ecosystems, flora, fauna and other organisms apart from man.

To summarise, this means that the various criteria are subdivided into four groups or principles: (i) assuring the socio-cultural functions, (ii) assuring the productive functions, (iii) counteracting environmental pollution, (iv) maintaining and promoting biological diversity. The various criteria for sustainable forest management are elaborated in greater detail later in this chapter. The text shown in italics provides some explanation of the various criteria, but is not part of the criteria.

It is self evident that monitoring is an essential element part of the planing process. This is worked out further in chapter 4. The control of the criteria will be carried out through the management plan. It is important to note that not all the criteria need to be complied with. Using the management plan the overall aim towards achieving sustainable forest management can be assessed. The point of departure will often differ considerably. Stands where the aim is to convert them to a stand with local species can therefore also be eligible. In exceptional cases, provided that the motivation is given, deviations would be allowed such as the use of certain types of pesticides when massive infestations or epidemics occur.

### 2. *Sustainability criteria regarding “the assurance of socio-cultural functions”*

#### 1) *Attention to socio-cultural functions*

*Within an international context of indicators and criteria on sustainability, the socio-cultural functions are very extensive. A great deal of attention is devoted to the development of participation, land use rights, responsibilities, employment, employment provisions. For the development of criteria for the sustainable forest management in the Belgium, the following elements are considered: observing the legal instruments and regulations, the recognition of the importance of participation, the regulations on education, health and safety and the recreational, cultural and historical functions. In the management plans, sufficient attention must be devoted to the evaluation of social influences. In addition, there is consultation with all the persons concerned. These are not only people directly affected by management operations, but also sports and youth clubs.*

**2) Compliance with existing laws and regulations.** The forest manager must respect all the applicable regulations (regional, national, European, international). Compliance with other signed agreements is due, there can be agreements with government agencies and guidelines which are not bound by government regulations. The forest management must also respect the international conventions and agreements signed by the country. For every management measure the manager must have all the necessary licences<sup>1</sup> before implementing the measure.

**3) Development of educational, and health and safety provisions.** The forest management must respect the legislation and regulations relating to the health and safety of employees, the social provisions and conditions of salaries and employment. The personnel employed in the forests must comply with the safety regulations drawn up by the General Employment Regulations. The forest management must respect the conventions of the International Labour Organisation signed by the country. Only employees with a sufficient degree of competence in this field shall be employed, both as regards production and as regards the environment. The owner must assume his responsibility concerning the training of his own employees. The

<sup>1</sup> With the exception of activities which have already been foreseen in an approved management plan

contract between the owner and the exploitant has to guarantee that the employees are informed about the conditions to be respected and have the necessary skills. For the organisation of the work, and for the use of materials and machinery, attention shall always be devoted to the safety of the employees who have been employed.

**4) Attention to recreational, cultural and historic elements.** Forest management must devote attention to recreational use, and must stimulate the selective accessibility of the forest to the public. The forest should be made accessible to the public in such a way that the ecological function is not jeopardised, and any disruption, both as regards time and in terms of location, is restricted, and if necessary, stopped. Special attention must be devoted to cultural or religious places or archaeological sites (including monuments) in the forest. Management must be adapted to maintain this heritage.

### **3. Sustainability criteria related to “the assurance of the productive and economic functions”**

**5) Attention to productive and economic functions.** *Forests must be considered and treated as a renewable natural resource that produces important raw materials. The maintenance of the productivity of the forest ecosystem as well as the optimisation and diversification of revenues needs attention. Forest management shall pay attention to the economic function now and in the future. Actions to enhance the forest quality such as selection and thinnings are encouraged. The criteria are focused on the maintenance of the forest and the maintenance of the quality of sites. Additional attention is devoted to the capacity of natural regeneration, forms of forest management and exploitation and restricting disruption by felling.*

**6) Maintaining the forest and the quality of the site.** Forest maintenance must be guaranteed. The area covered by forest must be retained in its totality. The management must be adapted to maintain or even improve the productive capacity of the forest soil for the future, to ensure the function of a renewable resource. For the exploitation, any form of degradation to the production capacity of the site, to the soil or to the remaining stand and the regeneration, as well as adverse effects on flora and fauna, must be avoided. Some important instruments include the training of employees and the use of an adapted and complete set of specifications. Part 5 examines the content and use of the specifications in greater detail. Soil working should be restricted to a minimum to avoid erosion and the loss of minerals. In combination with clearcut, scarification of the soil must be restricted to narrow strips or small surface areas. The superficial scarification of the soil, under the remaining seed trees, to promote natural regeneration, is always permitted. Restorative measures must be drawn up for parts of the forest that have been degraded. Measures must be worked out for the prevention and combating of forest fires.

**7) Attention for economic viability and diversification of revenues.** Forest management shall, following its objectives as laid down in the management plan, make a good estimation of the economic values of the products and services and their optimisation. Attempts are being made for a diversification of the revenues of the products and services of the forest. Forest management gives attention to the advantages of working on larger scales. Especially the advantages of cooperations are to be analysed. De advantages have a cost-reducing effect (cheaper management operations by greater surfaces) as well as an income-increasing effect (better timber prices by grouped sales).

**8) Preference for natural regeneration.** Natural regeneration is preferred. Important preconditions for natural regeneration include the suitability of the species to the site, the availability of a qualitatively good origin of trees in relation to the site, with the possibility of achieving an adequate stand quality and an adequate number of seedlings. For artificial regeneration, the same conditions must be met as regards the site and eco-type.

**9) Preference for small-scale fellings.** Small-scale fellings are preferred, because they better fit in with the natural dynamics of a forest and the natural equilibrium in a forest system. The maximum surface of a clearcut depends on the slope, the type of soil, the location and the temperament of the species. Clearcuts of more than 1 hectare in broad-leaved forests and 3 hectares in resinous stands must be justified in the management plan with detailed reasons, and is acceptable only in specific cases, such as the direct transformation of a homogenous plantation of non-domestic species or the regeneration of a plantation of poplars.

**10) Well-considered forms of forest management and exploitation.** A certain level of volume must be maintained in the forest by maintaining a balance between the harvest of timber and growth: the harvest must be smaller than the growth. This criterion is also a point of attention when thinning. The regeneration and exploitation must be spread over time and space in larger surface areas to create forests with trees of different ages. This policy must be part of the management plan. Early and intensive thinnings are recommended, mainly for shade-loving species with difficult degradable litter. This means that the forest floor is exposed more to sunlight, which promotes the formation of the humus, keeps the soil fertile and benefits the development of a shrub and plant layer.

**11) Preference for long rotation periods.** Systems with long rotation periods or without rotation periods (plentering) are preferred because of their possibilities for the development of the biological diversity and natural regeneration, because of the reduction in the frequency of large-scale intervention, and because of the potential with regard to the quality and diversification of the products. Short rotations can be accepted only if sufficient other sustainability characteristics are complied with.

**12) Management of non-timber forest products.** If there is hunting it serves to ensure that the size of the population of game is in accordance with what the forest ecosystem can support. A game management plan is drawn up for species that can be hunted, on the basis of the game management unit. This includes measures such as the shooting plan and defining rest zones. The game management plan also devotes attention to the specific role of predators and of species that are not hunted. Where there is hunting, the other functions of the forest are taken into account, including the recreational function. Poaching and non-orthodox hunting-methods are actively opposed; the release of "game" to be shot at is not permitted. Fishing and the harvest, picking or collecting of plants, fruits and mushrooms must take place so no damage is caused to the forest ecosystem<sup>2</sup>, the vegetation or the species. Visitors and recreational users are given the necessary information and instructions in this respect.

#### **4. Sustainability criteria relating to "the conservation of the environment"**

**13) Conservation of the environment.** The forest management helps to ensure a healthy environment, for example, by conserving water resources, soils and landscapes. In addition to a general obligation "to care for the environment", this means that the forest management devotes specific attention to closed mineral cycles, the use of biological and environmentally friendly pest control and counteracting drying out and any form of pollution.

**14) Obligation to care for the environment.** The environmental effects of any forest activities that could disrupt the ecosystem must be evaluated in advance. This criterion fulfils a general provision regarding the obligation to care for the environment and nature. This obligation can be described as follows: "Anyone who performs activities or orders these to be carried out is obliged to take every possible measure to prevent, restrict or restore the damage to nature." However, this measure is not aimed at imposing an environmental impact report for all activities. Law lays down the actions and activities subject to an environmental effect report.

**15) Preference for a closed mineral cycle.** The mineral cycle must be closed as far as possible by restricting both losses and imports. Fertilisation (enrichment with nutrients) is not permitted, because of the risk of eutrophication, ground water pollution, and changes in the plant layer. An exception is made for the regeneration of demanding species of trees (direct use in the planting hole). Measures to improve the soil (with the exception of the enrichment by nutrients) can be taken to restore forest soils that have been degraded. Every improvement in the soil must be preceded by an examination of the soil carried out by an independent laboratory recognised by the government. Dangerous and toxic products and products containing chlorine are prohibited. "Whole-tree-harvesting" is not permitted. Stripping the bark on the site is recommended, especially on non-fertile soils.

**16) Counteracting pollution.** The forest management should be focused on preventing the pollution of the soil, ground and surface water, air, etc. The use of biologically degradable oils is required. Oil changes are not permitted in the forest. Chemical substances and their packaging, non-organic liquid and solid waste, must be removed. The use of genetically modified organisms is prohibited<sup>3</sup>.

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<sup>2</sup> A forest ecosystem includes treeless areas, ponds and infrastructure which are found within the forest complex.

<sup>3</sup> Clones and upgrading are not genetically manipulated organisms.

**17) Preference for biological and environmentally friendly, pest control.** In the case of diseases and epidemics, the use of chemical pesticides is not permitted. The only exception is the use of the glyphosate to combat aggressive species (such as ). The use of biological methods is permitted on condition that the national legislation and internationally recognised scientific regulations are followed up and checked.

**18) Counteracting drying out.** The forest management must - as far as possible - contribute to the overall water management, both in infiltration and spring areas, and in river valleys. Watercourses must be able to flow freely. The loss of water from water-rich areas such as peat bogs, marshes, flood plains, sources; moors and damp heath land must be counteracted. Outside these areas, existing surface drainage systems may be retained if this is necessary and results in a better growth of trees of species suitable for the site. In exceptional cases the existing drainage system can be modified to optimise other functions. New drainage cannot be permitted anywhere.

## **5. Sustainability criteria relating to "the maintenance and enhancement of biological diversity"**

**19) Enhancement of biological diversity.** Biological diversity is an important element of sustainable forest management. Biological diversity encompasses both the (intra- and inter-specific) genetic diversity and the structural diversity of the forest ecosystem. Biological diversity in forests is a result of numerous factors, such as the variation in species, the presence of sporadic gaps as a result of trees being blown over by the wind, regeneration, the amount of dead wood, the presence of strata, the soil, the relative humidity, the great variety of light intensity, the forest management that is implemented, the relative safeguarding against external disturbances, the previous history and the area and connectivity.

**20) Maintenance and protection of valuable species and biotopes.** Forest management takes the principle of "caring for nature" into account, as well as the standstill principle applied to biological diversity. This means that all existing valuable natural elements must be protected. The forest management is directed towards the protection of these valuable natural elements. If there are rare, threatened or legally protected species, the necessary measures are taken to maintain the species and the biotope (breeding and foraging areas) to guarantee their survival and that of their habitat. Special attention should be devoted to exploitation in forests with early or late rare breeding birds. This may be done by including the conditions of exploitation during the breeding season in the specifications. It is possible to opt either for a long fixed no-cutting period (from 15/04 to 31/07, three months), or for a shorter period, combined with an ad hoc period related to the needs of the species present.

**21) Development of valuable biotopes.** For a certain part of the forest the forest management should be focused on developing nature. As a guideline for the area to be retained for this development of nature, a minimum of 5% is suggested. Stands can be selected on the basis of the natural value already present or its potential. The management is related to the target, i.e; a forest that corresponds to the natural forest in this location as closely as possible in terms of structure and composition and giving attention to border zones and open spaces. Intervention is justified only if it does not significantly affect the natural development. Individual economically valuable trees may be harvested and sold, if this does not have a noticeable influence on the composition and structure of the species. Other interventions may be considered to achieve the target. The development of nature pays attention to larger scale nature development plans where they exist.

**22) Preference for indigenous species and trees appropriate for the site.** For the purposes of afforestation and reforestation, it is preferable to use indigenous species and local origins that are well adapted to the characteristics of the site, in so far as they are available. A reason for this is that a large number of specialised organisms are dependent on indigenous species of trees, so that replacing them by species which are not indigenous could disrupt the food chain and ultimately result in biological impoverishment. In the case of artificial regeneration, the recommended origins must be used. For Flanders this means that as soon as the list with recommended origins is made available by the IBW - anticipated in 2000. Species which are identified as being "unsuitable" in the ecological files of species (being prepared by the IBW - publication anticipated at the end of 1998) cannot be used on that site. For non-indigenous species for which the IBW has not yet issued any ecological files the categories of Wallonia can be used. For Wallonia, only the "optimal" category of the "fichier écologique des essences" should be used. In the area covered by the management plan, a number of stands with a joint area of a minimum of 20% of the total area must consist of, or be converted into a mixture of indigenous species appropriate for the site.

**23) Stimulating the structural and species diversity.** There is a preference for varied forest structures (in terms of species and age), with mixed tree species of different ages because these factors have great relevance for biological diversity. Open gaps in the forest can also contribute to this. Forest management should be focused on the maintenance, and if possible, on increasing the structural and natural species diversity of the tree and shrub layer. The natural composition of species, soil and flora and fauna should be retained as far as possible. For example, uniform stands or any other form of land use should never replace forests with a great variety of species. Transforming forests of indigenous deciduous species into homogeneous forests of Norway spruce, poplar and other non-indigenous species, and Scots pine should not take place in any event.

For homogeneous plantations of poplar, Norway spruce, other non-indigenous species or pine, there must be a transformation plan. In poplar plantations, a layer of different indigenous woody plants is retained or created. It is permitted to manage this lower level as coppice wood and market it before the poplars are exploited. Within the other homogeneous plantations, the aim is for 30% of the basal area or crown cover to be composed of indigenous deciduous species. In the primary period plants in the lower level, as well as the trees growing underneath, can be included in this. However the purpose is to realise 30% indigenous deciduous species in the upper-layer. To realise this some indigenous deciduous trees are allowed to grow into the upper-layer so that a varied forest structure (in terms of species and age) can be developed.

**24) Attention for dead wood and old trees.** Dead wood and old trees are important elements for biological diversity. The relationship between fallen and standing dead wood will evolve during the development of the plantation. Shortly after exploitation, there is mainly fallen dead wood; during the development of the stand there will gradually be proportionally more standing dead wood. The opportunities for more dead wood are to be taken. During the exploitation the fallen dead wood will not be eliminated. The crown wood can contribute to achieve this purpose, but it can not be the only. Hollow and dead trees remain in situ (standing or fallen), except where they constitute a danger for passers by, for the spread of diseases or for fire. Those exceptional conditions are partly defined by law or regulation. The measures, taken to realise more dead wood, are to be documented substantially in the management plan. The evolution of the volume dead wood is to be followed up explicitly.

On the level of the stand, the aim is for a volume dead wood, fallen or standing, of at least 4% of the total volume of timber in the stand, spread as best as possible over all the dimensions and evolving within the planning as foreseen within the management plan.<sup>4</sup>

In every stand, some trees - preferentially deciduous indigenous trees - are indicated per hectare which must be retained for several rotations until they reach their natural life-span, this in so far as they do not constitute a pathological risk. As a guideline, 10 trees per hectare are proposed in every stand. In the case of stands with heavy, thick trees - in particular when 10 trees make up more than 10% of the basal area - a lower number may be accepted.

## **6. Forestry management instruments**

**25) Drawing up a management plan.** The present criteria are written with the idea that there is a need for cooperation between forest owners. The advice is oriented to the level of larger units of forests for which a global management-plan can be made. In general, it is accepted that management plans play an important role in the process of sustainable forest management. They constitute a valuable context for the evaluation of the various criteria. When assessing the forest management not all criteria must be complied with. The orientation on sustainable forestry must be clear from the management plan. Planning and evaluation focuses on the evolution of the forest, the profitability, the management activities, the social repercussions and the environmental effects. In order to compare the results and to permit an evaluation of the changes, the procedures must be coherent and it should be possible to reproduce. The level of detail of this evaluation must be proportionate to the intensity of the management activities and the vulnerability of the environment.

**26) An extensive management plan: content.** A detailed management plan must be available for the area concerned. For Flanders this plan is in accordance with appendix 1 of the resolution of the Flemish government of 4 December 1992. Basically, this management plan contains the long-term objectives for the

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<sup>4</sup> The aim is not to actively increase the volume of dead wood (through topping, girdling etc.) in order to reach the target.

area and provides a summary of the means that will be used to achieve these objectives. The document must reflect the different stages of the planning cycle.

- a. Inventory. During the first stage of the process the forest is described and generally identified.
- b. Study. During this stage, the data in the inventory are analysed. Different management-alternatives are compared with each other and evaluated. This part will be structured on the basis of the forest functions.
- c. Formulating the management objectives. On the basis of the analysis and the principles and criteria described above, choices are made in this stage for the management of the area. In formulating the management choices, attention is actively devoted to all the potential users. The results of this consultation and the decisions made are specifically described in the management plan.
- d. Programming the activities. The choices are resulting in specific measures in the form of plans for several years, which can produce an annual working plan. The level of detail depends on the nature of the planned activities. Essential components include the level of stocking, the felling and regeneration plan, the accessibility-plan and eventually the reconversion plan. The maps are made in function of the criteria.
- e. Monitoring and control. The last stage of the planning cycle is monitoring and control. For every measure, his contribution to achieve the general objectives is evaluated and controlled in a suitable way. If this contribution is inadequate, the measures and/or objectives will be revised. The control is adapted to the size, importance and nature of the area, the planned impact of the measures, and the importance of the management objective. Relevant data are noted in a way that can easily be controlled.

At the very least, the management objectives and the map materials can be consulted publicly. The owner may make a reservation with regard to the felling and the regeneration plan. The aim to achieve co-operation with different parties concerned is recommended.

**27) Review of the management plan.** The management plan is drawn up for a period of 20 years and remains linked to the forest. The management plan can be revised. The revision takes into account the results of the monitoring and control, new scientific information and techniques, and changing social, economic or environmental circumstances. The arguments for the revision are clearly included in the first section of the planning cycle.

**28) Specifications.** The exploitation must avoid any form of damage to the productive capacity of the site, the soil or standing trees, by using an adapted and complete set of specifications. These should at least indicate: the maximum permitted relation between load - capacity - type of tyre, the indication of the roads and pistes to be used, the period or weather conditions in which exploitation is permitted, the destination of the crown wood and the bark, the proposed payment in the case of damage to the remaining stand and the soil, the conditions of exploitation during the breeding season, and the prescription of biologically degradable oil. Changing oil in the forest is not permitted. Chemical substances and their packaging, non-organic liquid and solid waste, must be removed.

## **Annex**

### **Members of the Belgian FSC working group (10/98)**