

Principles and Criteria for a responsible forest management in Belgium

FSC 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 P&C.

FSC Criterion 1.1.

Forest management shall respect all national and local laws and administrative requirements

The forest manager must respect all the applicable regulations (regional, national, European and international). Compliance with other signed agreements is also required. This is the case with government agencies. Similarly, measures which are not bound by government regulations but which are the object of signed agreements must also be respected. For every stage in the management procedure, the manager must be in possession of all necessary licences before implementing a given measure. (2)

Indicator 1.1.1.: The forest owner or manager is aware of the regulations which are applicable to the forest-enterprise or the forest management.
Verifier : interview with forest owner and / or manager

Indicator 1.1.2. : No violations have been established of the regulations or other obligations which are applicable to the forest-enterprise or the forest management.
No reports of an offence have been made.
Verifier : field visit, consultation with forest administration, check status of protection and contact relevant services, stakeholder consultation

Indicator 1.1.3. : For all the forest management measures, the forest owners and / or manager must have necessary licences.
Verifier : field visit, consultation with forest administration, check status of protection and contact relevant services, stakeholder consultation

Indicator 1.1.4. : An inventory is prepared of all the agreements and contracts that have been signed by the forest owner and / or manager
Verifier : interview with forest owner / manager , consultation with forest administration

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Indicator 1.1.5. : No violations have been established of the agreements and contracts signed by the forest owner / manager. No reports of an offence have been made.

Verifier : field visit, consultation with forest administration, check status of protection and contact relevant services, stakeholder consultation

Guideline : relevant legislation for Belgium, Flanders, Wallonia and Brussels can be found in the document : 'Relevant Belgian Legislation'.

FSC Criterion 1.2.

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

The forest manager must respect all the applicable regulations (regional, national, European and international). Compliance with other signed agreements is also required. This is the case with government agencies. Similarly, measures which are not bound by government regulations but which are the object of signed agreements must also be respected. For every stage in the management procedure, the manager must be in possession of all necessary licences before implementing a given measure. (2)

Indicator 1.2.1. : No violations have been established of payments of all legally prescribed fees. No reports of an offence have been made.

Verifier : consultation with the forest administration, receipts, stakeholder consultation

FSC Criterion 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.

The forest manager must respect all the applicable regulations (regional, national, European and international). Compliance with other signed agreements is also required. This is the case with government agencies. Similarly, measures which are not bound by government regulations but which are the object of signed agreements must also be respected. For every stage in the management procedure, the manager must be in possession of all necessary licences before implementing a given measure. (2)

Indicator 1.3.1. : The forest owner / manager is aware of the international treaties applicable to the forest enterprise or the forest management.

Guideline : info about the international treaties and their application can be obtained by the relevant ministries

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Verifier : interview with forest owner / manager

Indicator 1.3.2 : No violations have been established of the international treaties that are applicable to the forest enterprise or the forest management. No reports of an offence have been made.

Verifier : field visit, consultation with forest administration, stakeholder consultation

Guideline : relevant international agreements and treaties for Belgium can be found in the document : 'Relevant Belgian Legislation'.

FSC Criterion 1.4.

Conflicts between laws, regulations and the FSC P&C shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties.

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 certifier and the involved or affected parties. (2)

Indicator 1.4.1 : Any substantive conflicts between laws, regulations and the FSC P&C shall be evaluated for the purposes of certification, on a cases by case basis, by the certifiers and the involved or affected parties. The dispute shall in all cases be referred to the Belgian FSC Working Group.

Verifier : discussion with forest owner / manager, the Belgian FSC working group

FSC Criterion 1.5.

Forest management areas should be protected from illegal harvesting, settlement and other unauthorised activities.

Indicator 1.5.1 : The forest owner/manager is aware of potential and actual problems. He/She can demonstrate reasonable measures were elaborated to prevent and actions were undertaken against illegal cuttings, settlement and other unauthorised activities.

Verifier : field visit, interview with forest manager/owner, measures to prevent illegal operations, agreements about policing of territory by own staff or other parties

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In law :

- *Forest decree (FL¹) art. 41, 50, 61, 63, 80, 81, 87 and chapter viii*
- *Decree regarding the organisation of the regional development (FL)*
- *Decree on nature conservation and the environment (FL): art. 69 and Implementing order regarding the alterations of the vegetation (FL)*
- *Code forestier (WAL) titre X (art 103-119), art 179 bis*
- *Act Cadenas (WAL) :*
- *Act on regional and urban development and the patrimony (WAL) : art. 41-52*

FSC Criterion 1.6.

Forest managers shall demonstrate a long-term commitment to adhere to the FSC P&C.

The forest manager shall demonstrate a long-term commitment to adhere to the FSC P&C. (2)

Indicator 1.6.1. : The forest owner / manager must provide a statement declaring his / her commitment to comply with the guidelines of the Belgian FSC standard for a period of at least 5 years and can demonstrate an understanding of the FSC P&C and how these criteria are integrated in its management.

Verifier : written statement ; interview with forest owner, field visit, check management plan

¹ FL = legislation of Flemish Region ; WAL = legislation of Walloon Region ; BR = legislation of Brussels Region ; BEL = national legislation

FSC Principe 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

In law :

- *Forest decree (FL) : art. 51 : In public forests, no user rights, of whatever sort, may be granted, except if an authority of the Flemish Government could be obtained.*
- *Code forestier (WAL) : titre IX (art 84-102), art 178*

FSC Criterion 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.

Indicator 2.1.1. : The forest owner should have legal land registry documents which clearly indicates the rights of property. A map showing legal boundaries is available.

Verifier : documents which demonstrate property, map with boundaries of the forest property.

Indicator 2.1.2. : In case user rights are exerted on the forest property, the forest owner / manager should have an inventory of the existing user rights on the forest property and written guidelines regarding rights and duties of the users.

Verifier : inventory of user rights, written guidelines with rights and duties of the users

Indicator 2.1.3. : Easements (such as right of way for farmers, ...) should be specified in the management plan. It is preferred to add a written statement, signed by the concerned parties.

Verifier : management plan, written statement

In law :

Forest Decree (FL) : art 12 The accessibility of a forest must be arranged by a regulation that does not contravene with the content of the management plan or with the stipulations of this decree and its implementing orders. The Flemish government must define the content and the procedures for the approval of this regulation.
Civil law – Book II (21-03-1804) (BEL): Goods and limits of property (art. 516-710).

FSC Criterion 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.

- Forest managers must bear in mind the importance of the forest's recreational use and are expected to encourage selective accessibility - in time and/or space - to the forest on the part of the public. (4)
- The forest should be made accessible to the public in such a way that ecological functions are not jeopardised and disruption is limited and if necessary ruled out altogether. Disruption can be regulated by limiting access to the forest, both in terms of time or space. (4)
- Special attention must be devoted to cultural, religious or archaeological sites (such as monuments) in the forest. Appropriate management techniques should be adopted in order to safeguard monuments or other sites forming a part of the socio-cultural heritage. (4)

Indicator 2.2.1. : The forest owner / manager should made accessible its forest to the public in such a way that ecological functions are not jeopardised and disruption is limited and if necessary ruled out altogether. Disruption can be regulated by limiting access to the forest, both in terms of time or space. How this will be done should be mentioned in the management plan.

Guideline : Public access may be provided through one or more of :

- * Free access on a part or the total surface of the forest (only on the forest roads)
- * Publicised open days
- * guided walks each year
- *

Issues with a special cultural value can be indicated such as view points, notable trees, historical features, ...

Verifier : field visit, management plan

Indicator 2.2.2. : an accessibility regulation should be available. The regulation is appropriate to the scale of the forest. At the minimum, the following items must be included in the accessibility regulation :

- * parts of the forest which are open for the public
- * time of accessibility
- * rights and duties of the public

The accessibility regulation should be made available for the public.

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Verifier : check accessibility regulation, field visit

Indicator 2.2.3. : The forest owner / manager must adapt the management for archaeological, historical, cultural or religious places or monuments in the forest. This should be mentioned in the management plan.

Verifier : field visit, check management plan, contact relevant stakeholders

In law :

Forest Decree (FL) : art 10

Forest Decree (FL) : art 12 The accessibility of a forest must be arranged by a regulation that does not contravene with the content of the management plan or with the stipulations of this decree and its implementing orders. The Flemish government must define the content and the procedures for the approval of this regulation

Implementation order regarding the accessibility and the occasional use of the forests(FL)

Decree regarding the protection of the archaeological patrimony (FL)

Decree on the Regional and Urban development and the patrimony (WAL)

FSC Criterion 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 from being certified.

Indicator 2.3.1. : Appropriate mechanisms shall be employed to resolve disputes. The forest owner/manager shall at least keep a complaints register. Relevant demands and complaints of affected people about forest management or forest use are considered when taking concrete decisions or measures over user rights. Attention shall be given to recreation and hunting.

Verifier : check procedures, complaints register , check accessibility regulation, management plan, interview with forest owner/manager, stakeholder consultation

Indicator 2.3.2. : The forest owner shall be insured regarding third-party liability

Verifier : check third-party insurance

Guideline : The Society Royale Forestière de Belgique offers a third-party insurance at its members ; In the Flemish Region, the government has foreseen a insurance regarding third-party liability for all forest owners.

FSC Principle 3 : Indigenous people's rights

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

According to the definition by the United Nations, there are no indigenous peoples in Belgium. Therefore, this principle is not applicable in its present form. Aspects of this principle which related to the interests of the local population are covered under Principle 2 and Principle 4.

FSC Criterion 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

FSC Criterion 3.2.

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

FSC Criterion 3.3.

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

FSC Criterion 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 free and informed consent before forest operations commence

FSC Principe 4 : Community relations and worker's rights

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

FSC Criterion 4.1.

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

Only qualified employees with appropriate skills are to be employed whether the field be production or the environment. The owner must assume responsibility with regard to the training of employees. The contract between the owner and the contractor must stipulate that employees have the necessary skills and have been informed about the conditions to be respected. (3)

Indicator 4.1.1.: The task description and terms of reference on the basis of which people are hired shall be clear.
Verifier : forest administration, management of personnel, contracts with employees,

Indicator 4.1.2. : Dependent on the skills and profile of the forest workers, a specific training shall be elaborated for every employee. At the minimum, training shall be provided for all employees within the framework of safety.

Guideline : In Flanders, training can be provided by the Educational Centre Groenendaal. In Wallonia, several organisations provide training, among them VALBOIS, Société Royale Forestire de Belgique, Forêt Wallonne, (Addendum 4).

Verifier : certificates of competence, discussions with employees

Indicator 4.1.3. : In case contractors are hired, the forest owner/manager should clearly specify the necessary skills of the forest workers hired by the contractor in the contract. When the regulation for recognised contractors in forestry comes into force in Flanders, contractors have to meet the criteria of this regulation.

Verifier : contracts with contractors

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In law :

Implementing order concerning regulation for recognised contractors in forestry (FL) : is in preparation

FSC Criterion 4.2.

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

The forest manager must respect the legislation and regulations relating to salaries, the health and safety of employees, social security and, finally, working conditions. The personnel employed in the forests must comply with the safety regulations drawn up under the terms of the General Employment Regulations or any other similar regulations in application in Belgium. (3)

During the planning of work tasks and during the use of materials and machinery, the safety of personnel will necessarily be taking into account.. (3)

Indicator 4.2.1. : The forest owner / manager must be familiar with the legislation and regulations relating to salaries, the health and safety of employees, social security and working conditions.

Verifier : interview with forest owner and / or manager,

Indicator 4.2.2. : No violations have been established of the regulations or other obligations concerning health and safety of employees. No reports of an offence have been made.

Verifier : field visit, interview with forest owner / manager, consultation with forest administration

Indicator 4.2.3. : All employees are provided with safety equipment, appropriate to the tasks of the workers and the equipment used. The forest owner / manager takes all reasonable measures to ensure that workers use the safety equipment that is provided. For employees of contractors, regulations regarding safety equipment and responsibility will be mentioned in the specifications.

Guideline : info about the minimum safety equipment in Addendum 4

Verifier :field check, check safety equipment, check specification and contract with contractors

In law:

Act and Codex on Welbeing at work (BEL)

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Implementing order concerning regulation for recognised contractors in forestry (FL) : is in preparation

FSC Criterion 4.3.

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

The forest manager must respect the conventions of the International Labour Organisation signed by the country. (3)

Indicator 4.3.1 : the employment conditions comply with International Labour Organisation convention 87

Guideline : info about the ILO Convention 87 can be found in the Addendum

Verifier : interview forest owner / manager, check employment contracts

Indicator 4.3.2 : the employment conditions comply with International Labour Organisation convention 98

Guideline : info about the ILO Convention 98, can be found in the Addendum

Verifier : interview with forest owner / manager, check employment contracts

In law:

Belgium signed the ILO conventions 29, 87, 98, 100, 105, 111, 138, 182

FSC Criterion 4.4.

Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations

- Planning and evaluation takes place in direct relation to forest evolution, profitability, different management activities, the various social repercussions and environmental effects. (25)
- A minimum requirement is that management objectives and map materials be available for public consultation. The owner, for his or her part, may express reservations with regard to the felling and the regeneration plan. It is highly desirable that co-operation between the different parties concerned be achieved. (26)
- Revision takes into account the results of monitoring and control, recent scientific developments and technical innovations as well as changing social, economic or environmental circumstances. (27)

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Indicator 4.4.1 : prior to the elaboration and approval of the management plan, people in the neighbourhood of the forest and interested groups, are informed about the management objectives and offered the opportunity to react on the objectives.

Verifier : check documents, stakeholder consultation

Indicator 4.4.2 : Relevant wishes and complaints have been taken into account in the management planning and implementation of management operations.

Verifier : interview with forest owner / manager, stakeholder consultation

Indicator 4.4.3 : The forest owner / manager is open to questions, remarks and suggestions from involved parties concerning the planning and implementation of management operations.

Verifier : interview with forest owner / manager, stakeholder consultation

See also criterion 2.3

FSC Criterion 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

See also criterion 2.3

FSC Principe 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.

FSC Criterion 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.

Indicator 5.1.1. : The forest owner/manager has to make a work plan and budget for the forest enterprise showing expected of costs and revenues for at least the current financial year.

Verifier : Annual budget

Indicator 5.1.2. : When deciding on forestry management, the direct and indirect effects of management operations, in relation to sustainable production of goods and services in the long run, have been taken into account.

Verifier : check management plan and administration forest enterprise, stakeholder consultation

Indicator 5.1.3. : The forest owner / manager has to motivate the decisions on forest management in its management plan, as to show that there is a balance between the different management objectives when describing the operations, means and conditions.

Verifier : check management plan and administration forest enterprise, stakeholder consultation

FSC Criterion 5.2.

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

- The forest manager is required, following the objectives laid down in the management plan, to make a balanced estimate of the commercial value of products and services and of the possibility of their optimisation. He or she will attempt to diversify product revenue and the services available in the forest. (8).
- The forest manager should also be aware that profitability increases in proportion to the scale of different operations. Hence, particular attention should be devoted to the advantages of co-operation between forest managers. Such agreements have a cost-reducing effect (reduction of management costs on larger surfaces), on the one hand, an income-increasing effect (better timber prices for grouped sales), on the other. (8)

Indicator 5.2.1. : the forest manager is required, following the objectives laid down in the management plan, to make a balanced estimate of the commercial value of products and services and of the possibility of their optimisation. He or she will attempt to diversify product revenue and the services available in the forest..

Guideline: A mixture of tree species can contribute to diversification of product revenue and services

Verifier : field visit, management plan and administration forest enterprise

Indicator 5.2.2. : the forest owner / manager should devote particular attention to the advantages of co-operation between forest managers. Such agreements have a cost-reducing effect (reduction of management costs on larger surfaces), on the one hand, an income-increasing effect (better timber prices for grouped sales), on the other.

Verifier : contact relevant stakeholders, check administration forest enterprise, consultation with forest administration and forest group co-ordinator

FSC Criterion 5.3.

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

- Appropriate management techniques must be adapted in order to maintain or even improve the productive capacity of the forest soil for the future thus ensuring the function of a renewable resource. During exploitation, any form of degradation to the production capacity of the site, to the soil or to the remaining stand and its regeneration, as well as adverse effects on flora and fauna, must be avoided. Essential steps to this end include the training of employees and the use of an properly thought out and comprehensive set of specifications.(7)
- Stripping the bark on site is recommended, especially on non-fertile soils. Whole-tree harvesting is not permitted. (15)

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Indicator 5.3.1 : During exploitation, any form of degradation to the production capacity of the site, to the soil or to the remaining stand and its regeneration, as well as adverse effects on flora and fauna, must be avoided. Essential steps to this end include the training of employees and the use of an properly thought out and comprehensive set of specifications. There are procedures in place to check operations in the field and if necessary to respond properly to problems, for instance by stopping the operations or by imposing special requirements.

Verifier : check specifications and procedures, check management plan, contact relevant stakeholders, field check ; check agreements with contractors

Indicator 5.3.2 : Stripping the bark on site is recommended, especially on non-fertile soils. Whole-tree harvesting is not permitted.

Guidance: Whole-tree-harvesting means that everything is extracted from the forest, including crown and roots.

Verifier : field visit, check management plan,

FSC Criterion 5.4.

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

See 5.2

FSC Criterion 5.5.

Forest management operations shall recognise, maintain, and where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.

For recreation : see 2.2

For hunting : see : 6.2 and 6.3.

For watersheds : see 6.3

For fishing, fruit and mushroom picking : see 6.2.

For archaeological, historical, cultural or religious places or monuments : see 2.2.3

FSC Criterion 5.6.

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

- A certain level of the standing stock must be ensured by maintaining a balance between the harvest of timber and increment. This criterion should also be taken into account when thinning. Regeneration and exploitation, in those cases where the surface area is sufficiently large, must be spread over time and space in order to create uneven-aged forests. This policy is necessarily an integral part of the management plan.. (6)

Indicator 5.6.1. : on the level of the forest enterprise, the harvest of timber is smaller or equal to the increment

Guidance : The harvest rate may not solely be determined based on the production tables of the tree species, it is necessary to take into account the results of the 10-yearly inventories of the forestry administration.

Verifier : management plan

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.

FSC Criterion 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.

- The environmental effects of any forest activities that might disrupt the ecosystem must be evaluated in advance. The measures and activities subject to an environmental effect report are laid down by law. (14)

Indicator 6.1.1. : the forest owner / manager must be aware of the legislation in this respect
Verifier : interview with forest owner / manager

Indicator 6.1.2. : the forest owner / manager must demonstrate that the environmental impacts of future operations have been considered and taken into account when conducting these operations. These operations include :

- * conversion of the forest
- * clear cuts
- * change in silvicultural treatment
- * stopping drainage
- * drainage
- * deforestation and afforestation

* construction and maintenance of infrastructure and roads

The evaluation is appropriate to the scale and intensity of the forest operation and the conservation value of the forest.

Guideline : methodology how to asses will be provided

Verifier : field visit, results of evaluation, management plan, check administration of forest enterprise, contact relevant stakeholders

In law :

Implementing order on stipulations for the Flemish Region of the different categories of operations, where an Environmental impact report is demanded (FL). For deforestation of more than 3 hectares, one is obliged to carry out a study on the impact on the environment.

Law regarding the protection of private forests (WAL, BR)

Decree on the Regional and Urban development and the patrimony (WAL)

FSC Criterion 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.

- All existing valuable natural elements must be protected. Forest management is directed at the protection of these valuable natural elements. If there are rare, threatened or legally protected species present, the required measures are taken to maintain the species and the biotope (breeding and foraging areas) in order to guarantee their survival and that of their habitat. In the management plan, a map is enclosed where the sensitive zones in terms of ecological and social characteristics are demarcated. (20, 26)
- Poaching and non-orthodox hunting-methods are prohibited. The release of “game” to be shot at is not permitted. (12)
- Fishing and the harvest, picking or collecting of plants, fruits and mushrooms must take place - if allowed – in such a way as not to damage the forest ecosystem², the vegetation or the different species found in the forest. It is necessary that visitors and recreational users be given information and instructions in this respect. (12)
- Special attention should be devoted to exploitation in forests with exceptional vegetation. or early or late rare breeding birds. The specifications must detail the conditions of exploitation imposed during the breeding season or when working in exceptional vegetation. They must also indicate the weather conditions under which work is not to be undertaken and this in spite of the forest type. Hence, it is possible to opt for a long fixed no-cutting period (three months) combined with an ad hoc period related to the needs of the species present. (20)

Indicator 6.2.1.: The likely presence of rare, threatened or legally protected species and their habitats (e.g. nesting and feeding areas) has been assessed on the basis of the best available information. It must be mentioned in the management plan what measures will be undertaken to protect these elements and their habitats. Areas containing or likely to contain such species are identified, listed and marked on maps which must be added to the management plan.

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

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The inventory is taking into account the following elements as far as the information is available :

- * breeding place and habitats of rare fauna
- * habitats of rare plants
- * rare ecological structures such as hollow trees, old ponds, pools, etc.
- * valuable open spaces

Guideline : The forest owner / manager is recommended to collaborate with organisations which are showing interest to make an inventory on his / her forest property.

Verifier : check inventory management plan and map, field check, contact relevant stakeholders, consultation with forest and nature conservation service

Indicator 6.2.2. : In decisions on forest management and forest use, the habitat requirements of rare, threatened or legally protected plant and animal species have explicitly been taken into account

Verifier : management plan, field visit

Indicator 6.2.3. : The forest owner can demonstrate reasonable actions were undertaken against poaching and non-orthodox hunting methods and release of game to be shot at.

Verifier : game management plan, contact relevant stakeholders, consultation with forest service

Indicator 6.2.4. : In the management plan and the accessibility regulations, measures must be included about fishing, fruit, plants or mushroom picking -in case these are allowed- as not to damage the forest ecosystem. Forest managers / owners must provide information in this respect to the public.

Verifier : check management plan and accessibility regulation

Indicator 6.2.5. : The specifications must detail the conditions of exploitation imposed during the breeding season or when working in exceptional vegetation. They must also indicate the weather conditions under which work is not to be undertaken. Hence, it is possible to opt for a long fixed no-cutting period (three months) combined with an ad hoc period related to the needs of the species present. Info on which grounds the no-cutting period it is chosen will be given as well

Verifier : check management plan and specifications, field visit

in law :

Act on Nature conservation (including relevant implementing orders) (BEL) : still valid in Walloon Region and some articles are still valid in the Flemish Region.

Decree on nature conservation (FL) :stand still principle and change of vegetation

Ordinance concerning the protection of nature (BR)

Implementing order concerning the protection of natural habitat and wild fauna and flora (BR)

Implementing order concerning the protection of birds (BR)

Ordinance concerning the protection of fauna and hunting (BR)

Decree on hunting (FL)

Decree on hunting (WAL)

FSC Criterion 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**

indicators under criterion 6.3a : forest regeneration and succession

- Forest maintenance must be undertaken. The area covered by forest must be retained in its totality. (7)
- Natural regeneration is preferred. Important preconditions for natural regeneration include the suitability of the species to the site, the availability of a qualitatively satisfactory provenance of trees in relation to the site. Other considerations include adequate stand quality and number of seedlings. The same conditions must be met concerning site and eco-type in cases of artificial regeneration. (9)
- Small-scale fellings and silvicultural interventions such as thinning are to be preferred because they are more suitable to the natural dynamics of forest ecosystems. Clearcuts, if they prove to be necessary, should be limited to 1 ha in broadleaf forests and 3 ha in conifer forests given the disadvantages they entail (denuded soil; exposition to wind, sun and rain; loss of nitrates through percolation ; increased risk for soil erosion; ...) and the fact that they often lead to even-aged monospecific stands. Detailed reasons must be given in the management plan for clearcuts over a larger surface. These are acceptable only if the main principles found in the criteria are respected and if they lead to a higher degree of naturalness (e.g. transformation of an even-aged homogenous plantation of exotics to an uneven-aged mixed stand with indigenous species). In the regeneration of a plantation of poplars, the maximum surface of 3 ha must also be respected. In a shelterwood system, the final felling is not considered as a clearcut. In the strip system, the disadvantages of a clearcut are strongly attenuated because of the side protection of the old stand. In such cases, the breadth of the strips is smaller than 1 or 2 times the average height of the stand, dependent on the species and the local circumstances. (10)
- The choice of rotation period depends on the treatment and the silvicultural system. Within this context, rotation periods should be as long as possible. Such rotation periods approach those of natural forests and permit the optimisation of biodiversity by favouring rare species in particular. Short rotations may be acceptable (e.g. in a system with early and intense thinning operations) only if sufficient alternative sustainability requirements are met. (11)
- Where hunting is undertaken, a proper balance between the game population and the capacities of the forest ecosystem should be ensured. A game management plan for species that can be hunted inside a game management unit should be drawn. This includes measures such as the shooting plan and the definition of rest zones. The game management plan should also take the specific role of predators and of species that cannot be hunted into account. During hunting, other functions of the forest, including the recreational function, must be respected.. (12)

Indicator 6.3.1. : A game management plan for species that can be hunted inside a game management unit should be drawn. This includes measures such as the shooting plan and the definition of rest zones. The game management plan should also take the specific role of predators and of species that cannot be hunted into account. During hunting, other functions of the forest, including the recreational function, must be respected.

Verifier : game management plan, contact relevant stakeholders

Indicator 6.3.2. : The forest must be maintained intact. The area covered by forest must be retained in its totality.

Verifier : field visit, check management plan

Indicator 6.3.3. : Natural regeneration is preferred. Important preconditions for natural regeneration include the suitability of the species to the site, the availability of a qualitatively satisfactory provenance of trees in relation to the site. Other considerations include adequate stand quality and number of seedlings. The same conditions must be met concerning site and eco-type in cases of artificial regeneration.

Guideline: for Wallonia, the "Fichier Ecologique des Essences" gives information about the site

Verifier : field visit, check management plan

Indicator 6.3.4. : Small-scale fellings and silvicultural interventions such as thinning are to be preferred.

- * Clearcuts, if they prove to be necessary, should be limited to 1 ha in broadleaf forests and 3 ha in conifer forests. Detailed reasons must be given in the management plan for clearcuts over a larger surface. These are acceptable only if the main principles found in the FSC P&C are respected and if they lead to a higher degree of naturalness (e.g. transformation of an even-aged homogenous plantation of exotics to an uneven-aged mixed stand with indigenous species).
- * In the regeneration of a plantation of poplars, the maximum surface of 3 ha must also be respected.
- * In a shelterwood system, the final felling is not considered as a clearcut.
- * In the strip system, the disadvantages of a clearcut are strongly attenuated because of the side protection of the old stand. In such cases, the breadth of the strips is smaller than 1 or 2 times the average height of the stand, dependent on the species and the local circumstances.

Verifier : field visit, management plan

Indicator 6.3.5. : Rotation periods should be as long as possible. Short rotations may be acceptable (e.g. in a system with early and intense thinning operations) only if sufficient alternative sustainability requirements are met.

Verifier : field visit, management plan

In law :

Ordinance concerning the protection of fauna and hunting (BR)

Decree on hunting (FL)

Decree on hunting (WAL)

Indicators under criterion 6.3b : genetic species and ecosystem diversity

- For the purposes of afforestation and reforestation and in so far as they are available, it is preferred to use indigenous species of autochthonous provenance that are suitably adapted to the characteristics of the site. In the case of artificial regeneration, government recommended provenances must be used. Moreover, the species should be soil-adapted and site-adapted.-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 to a mixture of indigenous species appropriate to the site, as far they are available. (22)
- Varied forest structures (in terms of species and age), both uneven-aged and mixed, are preferred because these factors are essential to biological diversity in forests. The creation of gaps and forest fringes 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 conserved as far as possible. (23)
- Any opportunity for increasing in dead wood are to be considered and taken. Wood derived from pruning will not be eliminated and this contributes to the presence of dead wood in the forest. Similarly, crown wood can contribute to this end but it can not be the only criterion considered. Dead or hollow trees are left in place (standing or fallen) except where they constitute a danger for passers by, the possibility of the spread of diseases or a fire risk. Such exceptional conditions are usually the subject of legal provisions or other regulations. Measures, taken to increase the quantity of dead wood, are to be documented in detail in the management plan. Changes in the volume of dead wood should be the subject of explicit follow-up procedures. In so far as the stand is concerned, the aim is to attain 4% of the total volume of timber in the stand in dead wood (fallen or standing). This should be distributed in so far as possible across the different dimension classes and should develop according to the provisions laid down under the management plan³. Where commercially valuable trees are present, and sufficient dead wood is already to be found (more than 4 %), a certain number may be logged (24)
- In every stand, a certain number of trees - preferentially deciduous indigenous trees - are indicated per hectare. These trees are conserved for several rotations until they reach the end of their natural life-span providing they do not constitute a pathological risk. 10 trees per hectare in each stand might be taken as a guideline. 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. (24)

Indicator 6.3.6. : For the purposes of afforestation and reforestation and in so far as they are available, it is preferred to use indigenous species of native provenance that are suitably adapted to the characteristics of the site. In the case of artificial regeneration, government recommended provenances must be used. Moreover, the species should be soil-adapted and site-adapted. In the Walloon region, the prescriptions of the "Fichier écologique des essences" must be respected. In Flanders the provenances recommended by the Institute for Forestry and game management must be chosen, as long as they are available. For all the stand dominating species, only the "optimal" classes shall be accepted.

Verifier : management plan, field visit

Indicator 6.3.7. : 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 to a mixture of indigenous species appropriate to the site, as far they are available.

Verifier : management plan, field visit

³ The aim is not to actively increase the volume of dead wood (through topping, girdling etc.) in order to reach the target.

Indicator 6.3.8. : Varied forest structures (in terms of species and age), both uneven-aged and mixed, are preferred. The creation of gaps and additional work on forest edges 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 conserved as far as possible.

Verifier : check management plan, field visit,

Indicator 6.3.9. : Any opportunity for increasing in dead wood are to be considered and taken. Wood derived from pruning will not be eliminated and this contributes to the presence of dead wood in the forest. Similarly, crown wood can contribute to this end but it can not be the only criterion considered. Dead or hollow trees are left in place (standing or fallen) except where they constitute a danger for passers by, the possibility of the spread of diseases or a fire risk. Such exceptional conditions are usually the subject of legal provisions or other regulations. Measures, taken to increase the quantity of dead wood, are to be documented in detail in the management plan. Changes in the volume of dead wood should be the subject of explicit follow-up procedures. In so far as the stand is concerned, the aim is to attain 4% of the total volume of timber in the stand in dead wood (fallen or standing). This should be distributed in so far as possible across the different dimension classes and should develop according to the provisions laid down under the management plan. Where commercially valuable trees are present, and sufficient dead wood is already to be found (more than 4 %), a certain number may be logged

Verifier : check management plan, field visit,

Indicator 6.3.10. : In every stand, a certain number of trees - preferentially deciduous indigenous trees - are indicated per hectare. These trees are conserved for several rotations until they reach the end of their natural life-span providing they do not constitute a pathological risk. 10 trees per hectare in each stand might be taken as a guideline. 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.

Verifier : check management plan, field visit

Indicators under criterion 6.3c : natural cycles that effect the productivity of the forest ecosystem

- The mineral cycle must be closed as far as possible by restricting both losses and imports. (15)
- “Whole-tree-harvesting” is not permitted. Stripping the bark on site is recommended, especially on non-fertile soils. (15)
- Fertilisation (enrichment with nutrients) is not permitted due to the risk of eutrophication, ground water pollution and changes in the plant layer. When soils have been degraded, fertilisation aimed at regeneration (direct use in the planting hole) can be undertaken. For similar reasons, measures to improve the forest soil (with the exception of the enrichment by nutrients) can be taken. Every improvement in the soil must be preceded by an examination of the soil carried out by an independent, government recognised laboratory. (15)
- Watercourses must be able to flow freely. The drainage 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 if it helps to realise management objectives. New drainage cannot be permitted anywhere. (18)
- Tillage should be restricted to a minimum to avoid erosion and the loss of minerals. In combination with clearcut on slopes, 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. (7)

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Indicator 6.3.11. : Fertilisation (enrichment with nutrients) is not permitted. When soils have been degraded, fertilisation aimed at regeneration (direct use in the planting hole) can be undertaken. For similar reasons, measures to improve the forest soil (with the exception of the enrichment by nutrients) can be taken. Every improvement in the soil must be preceded by an examination of the soil carried out by an independent, government recognised laboratory.

Verifier : field visit, management plan, administration of forest enterprise, reports of laboratories

Indicator 6.3.12. : The drainage 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 if it helps to realise management objectives. New drainage cannot be permitted anywhere. As far as possible, forest management must contribute to integral water management, both in infiltration and seepage areas and in river valleys.

Verifier : check management plan and administration forest enterprise, field visit

For whole-tree-harvesting and stripping of the bark, see 5.3.2

In law :

Forest Decree (FL) : according to art 20 (9) it is forbidden to use fertilisers, except for manure in the planting hole or when foreseen in the management plan or licence for the Forest Service.

FSC Criterion 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

- A certain part of the forest should be set aside for natural development and forest management should concentrate on maintaining this natural development as principle function. 5% is suggested as a guideline for the area to be set aside. Stands can be selected on the basis of existing or potential natural value. Management is dependent on the goals to be achieved. This entails the maintenance of a forest environment that corresponds as closely as possible to the natural forest in terms of structure and composition in this location. Border zones and open spaces should also be taken into account. Intervention is justified only if it does not significantly affect 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 area. Other interventions may be considered if the target goals are likely to be met by such interventions. Such interventions might involve initial improvements, the elimination of exotics, counteracting edge effects etc..(21)

Indicator 6.4.1. : The stands to be set aside can be selected on the basis of the natural value already present or its potential. 5% is suggested as a guideline for the area to be set aside. Border zones and open spaces should also be taken into account.

When certification takes place on a group level, the area to be set aside will be 5 % on the level of the forest entity with a common management plan:

- * It shall be decided on the level of the forest entity which locations will be set aside.
- * The location will be selected on the basis of the natural value already present or its potential
- * Compensation for forest owners which contribute to this set aside area, will be discussed on the level of the forest entity.

Verifier : management plan, field visit, consultation with the forest group co-ordinator

Indicator 6.4.2. : The management of the stands which are set aside is related to the target, 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. Other interventions may be considered if the ecosystems will evolve towards the target. One can think about eliminating exotics, counteracting edge effects, ...

Verifier : management plan, field visit

FSC Criterion 6.5.

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

- Appropriate management techniques must be adapted in order to maintain or even improve the productive capacity of the forest soil for the future thus ensuring the function of a renewable resource. During exploitation, any form of degradation to the production capacity of the site, to the soil or to the remaining stand and its regeneration, as well as adverse effects on flora and fauna, must be avoided. (7)
- Exploitation must avoid any form of damage to the productive capacity of the site, the soil or standing trees. This requires the use of an appropriate and complete set of specifications. These should at least indicate: the maximum permitted relation between load/capacity/type of tyre, which roads and tracks are 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 type of biologically degradable oil to be used. (28)
- As far as possible, forest management must contribute to integral water management, both in infiltration and seepage areas and in river valleys. (18)
- Tillage should be restricted to a minimum to avoid erosion and the loss of minerals. In combination with clearcut on slopes, 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. (7)

Indicator 6.5.1. : In the specifications for the exploitation, at least the following should be indicated :

- * the maximum permitted relation between load/capacity/type of tyre,
- * which roads and skidding roads are to be used

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- * 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,
- * the type of biologically degradable oil to be used.

Verifier : check specifications, field check

Indicator 6.5.2 : Tillage should be restricted to a minimum to avoid erosion and the loss of minerals. In combination with clearcut on slopes, 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.

Verifier : Field check, management plan

regulations about drainage see 6.3.12

in law :

Act on Nature conservation (BEL) : art. 56 and 57 about seedlings of conifers on less than 6 meter of the river banks

FSC Criterion 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 Organisation 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 minimise health and environmental risks

- The use of chemical pesticides is not permitted in combating diseases and epidemics. The use of glyphosphate to combat aggressive exotics (such as *Prunus serotina*) is accepted, as long as no ecologically safer product with the same efficiency is available. The use of biological methods is permitted on condition that follow-up and assessment meet internationally recognised scientific regulations and the requirements laid down by national legislation (17)
- The personnel employed in the forests must comply with the safety regulations drawn up under the terms of the General Employment Regulations or any other similar regulations in application in Belgium. During the planning of work tasks and during the use of materials and machinery, the safety of personnel will necessarily be taking into account. (3)
- Chlorinated, dangerous and toxic products are prohibited. (16)

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Indicator 6.6.1. : Chlorinated, dangerous and toxic products are prohibited

Verifier : Field check

Indicator 6.6.2. : The use of chemical pesticides is not permitted in combating diseases and epidemics, except if it is obliged by law. The use of glyphosphate to combat aggressive exotics (such as *Prunus serotina*) is accepted, as long as no ecologically safer product with the same efficiency is available.

Verifier : field check, consultation with the forest administration

Indicator 6.6.3. : The use of pesticides is clearly documented and monitored.

Guideline : a template in added in addendum 3

Verifier : check monitoring

Regarding training : see 4.1.2

in law :

Royal implementing order regarding the storage, the marketing and use of pesticides for agricultural use (BEL)

Act an Codex on welfare at work (BEL)

Ordinance concerning the use of pesticides (BR)

Decree regarding the reduction of the use of pesticides by public bodies in the Flemish Region (FL)

Forest decree : art 20, art 21, art 96 (FL)

Implementing order on banning of the use of herbicides in certain public properties (WAL)

FSC Criterion 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.

- Forest management should pay particular attention to the prevention of the pollution of underground and surface water, the soil and air. Oil changes of machines are not permitted in the forest. Chemical substances and their packaging as well as non-organic liquid and solid waste must all be removed. The use of biologically degradable chain-saw oils is required. (16)

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Indicator 6.7.1. : Oil changes of machines are not permitted in the forest.
Verifier : field check

Indicator 6.7.2. : Chemical substances and their packaging as well as non-organic liquid and solid waste must all be removed as stipulated in the legislation.
Verifier : field check

Indicator 6.7.3. : The use of biologically degradable chain-saw oils is required.
Verifier : field check

in law :

VLAREA (FL)

Decree on waste (WAL)

FSC Criterion 6.8.

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

- The use of genetically modified organisms is prohibited. (16)
- The use of biological methods is permitted on condition that follow-up and assessment meet internationally recognised scientific regulations and the requirements laid down by national legislation (17)

Indicator 6.8.1. : The use of genetically modified organisms is prohibited⁴.
Verifier : File with documentation on the origin of seedlings

Indicator 6.8.2. : Biological methods can be used on condition that follow-up and assessment meet internationally recognised scientific regulations and the requirements laid down by national legislation.
Verifier : field check ; check authorities

Indicator 6.8.3. : the use of biological methods is clearly documented and monitored.
Guideline : a template is added in addendum 3.2

⁴ Clones and selected trees are not genetically manipulated organisms

Draft, 14/10/02

Verifier : check monitoring

in law :

Royal implementing order regarding the storage, the marketing and use of pesticides for agricultural use (BEL)

FSC Criterion 6.9.

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

- For the purposes of afforestation and reforestation and in so far as they are available, it is preferred to use indigenous species of autochthonous provenance that are suitably adapted to the characteristics of the site. In the case of artificial regeneration, government recommended provenances must be used. Moreover, the species should be soil-adapted and site-adapted.-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 to a mixture of indigenous species appropriate to the site, as far they are available. (22)

Indicator 6.9.1. : The use of exotic species shall be carefully monitored.

Guideline : a template is added in addendum 3

Verifier : check monitoring

See also 6.3 b

FSC Criterion 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.**

Uniform stands or any other form of land use should never replace forests with a great variety of species. Transforming forests of indigenous species into homogeneous forests of Norway spruce, poplar and other non-indigenous species, and also Scots pine should not take place in any event. (23)

Indicator 6.10.1. : the forest owner / manager must be aware of the legislation in this respect

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Verifier : interview forest owner / manager

Indicator 6.10.2. : uniform stands or any other form of land use should never replace forests with a great variety of species. Transforming forests of indigenous species into homogeneous forests of Norway spruce, poplar and other non-indigenous species, and also Scots pine should not take place in any event.

Verifier : field visit, check management plan, consultation with forest administration

in law :

Decree on nature conservation (FL) /art over standstill principe

FSC 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 objective of management, and the means of achieving them, shall be clearly stated

FSC Criterion 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

- A detailed management plan must be available for the area concerned. Basically, this management plan contains the long-term objectives for the 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 : inventory, study, formulating the management objectives, programming the activities, monitoring and control. (26)
- When elaborating the management plan, the forest owner / manager shall actively seek for collaboration with potential stakeholders and partners who can give useful information.
- For Flanders, the content of the management plan is in accordance with Addendum I of the implementing order of December 4, 1991 of the Forest Decree. (26)

- For Wallonia, the level of detail increases with the surface of the management unit and the vulnerability of the environment.. In practice, this means that the management plan must contain the following elements:
 1. the information required for the administrative identification of the owner, the forest manager (name, address, characteristics) and the forest (situation ; surface ; special designation such as nature reserve etc.),
 2. an analysis of the state of the forest and its potential in terms of :
 - ecological conditions
 - types of stands
 - facilities
 - zones of ecological or social interest,
 3. Definition of the objectives for the three forest functions (production, social and ecological),
 4. Description of the management techniques adopted in relation to the three main functions:
 - production function : description of management procedures, exploitation plan, management of game etc.),
 - social function : accessibility-plan (surface that is open to the public, duration, infrastructure etc.),
 - ecological function : specific management procedures concerning rare or protected habitats or species.

General understanding of these elements can be enhanced by supplementing them with the following documents :

- a) map of the forest (carte IGN on a scale of 1/10.000 or 1/25.000) indicating the main towns or villages adjacent to the forest and the different modes of access,
- b) map indicating the different parcels making up the forest including the following characteristics:
 - the scale, the geographical North, the total surface of the forest and the date of the establishment of the parcels,
 - the borders of the forest, the modes of access, the road system and water courses and other facilities (forest houses etc.),
 - the demarcation of the numbered forest parcels. Every parcel is subject to the same treatment and can be easily identified on the site ,
 - the demarcation of sensitive zones given the different ecological and social factors,
- c) maps of the region used for pedological or geological purposes (optional). (26)

Indicator 7.1.1. : when elaborating the management plan, the forest owner / manager shall actively seek for collaboration with potential stakeholders and partners who can give useful information.

Verifier : consultation with forest administration, stakeholder consultation

Indicator 7.1.2. : For Flanders, the content of the management plan is in accordance with Addendum I of the implementing order of December 4, 1991 of the Forest Decree.

Verifier : management plan

Indicator 7.1.3. : For Wallonia and the Brussels Region, the level of detail increases with the surface of the management unit and the vulnerability of the environment.. In practice, this means that the management plan must contain the following elements:

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1. the information required for the administrative identification of the owner, the forest manager (name, address, characteristics) and the forest (situation ; surface ; special designation such as nature reserve etc.),
2. an analysis of the state of the forest and its potential in terms of :
 - ecological conditions
 - types of stands
 - facilities
 - zones of ecological or social interest,
3. Definition of the objectives for the three forest functions (production, social and ecological),
4. Description of the management techniques adopted in relation to the three main functions:
 - production function : description of management procedures, exploitation plan, management of game etc.),
 - social function : accessibility-plan (surface that is open to the public, duration, infrastructure etc.),
 - ecological function : specific management procedures concerning rare or protected habitats or species.

General understanding of these elements can be enhanced by supplementing them with the following documents :

- a) map of the forest (carte IGN on a scale of 1/10.000 or 1/25.000) indicating the main towns or villages adjacent to the forest and the different modes of access,
- b) map indicating the different parcels making up the forest including the following characteristics:
 - the scale, the geographical North, the total surface of the forest and the date of the establishment of the parcels,
 - the borders of the forest, the modes of access, the road system and water courses and other facilities (forest houses etc.),
 - the demarcation of the numbered forest parcels. Every parcel is subject to the same treatment and can be easily identified on the site ,
 - the demarcation of sensitive zones given the different ecological and social factors,
- c) maps of the region used for pedological or geological purposes (optional). (26)

Verifier : Management plan

links with other criteria :

criterion 1.6 for how the FSC P & C are integrated in the forest management

criterion 2.1 for the easements

criterion 2.2 and 2.3 for user rights, public access and adaptation of management for archaeological, historical, cultural or religious places or monuments in the forest

criterion 4.4 for incorporation of results of evaluation of social impacts in management planning

criterion 5.1 for the economic viability

criterion 5.2 for the optimal use of forest products

criterion 5.3 for the waste and damage associated with harvesting

criterion 5.6 for the rate of harvest of forest products

criterion 6.1 for environmental safeguards based on environmental assessments

criterion 6.2 for the identification and protection of rare, threatened and endangered species

critterion 6.3 for maintenance, enhancing or restoring ecological functions and values
critterion 6.4 for set aside of a part of forest property
critterion 6.5 for description and justification of harvesting techniques and equipment to be used.
critterion 6.10 for conversion of forests into plantations or non-forest land
critterion 8.1 for aspects of monitoring

FSC Criterion 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

- The management plan is drawn up for a period of 20 years and remains applicable should ownership of the forest change. Nevertheless, the management plan can be revised. Revision takes into account the results of monitoring and control, recent scientific developments and technical innovations as well as changing social, economic or environmental circumstances. The arguments for the revision are clearly indicated in the first section of the planning cycle. (27)

Indicator 7.2.1. : the forest owner / manager can demonstrate how potential users and stakeholders were consulted, who was consulted, and how the results of this consultation were taken into account in the management decisions.

Verifier : results of consultation, management plan, interview forest owner / manager

Indicator 7.2.2 : The management plan is drawn up for a period of 20 years and remains applicable should ownership of the forest change.

Verifier : management plan

Indicator 7.2.3 : Revision of the management plan takes into account the results of monitoring and control, recent scientific developments and technical innovations as well as changing social, economic or environmental circumstances. The arguments for the revision are clearly indicated in the first section of the planning cycle.

Verifier : management plan, monitoring documents

FSC Criterion 7.3.

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

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- Only qualified employees with appropriate skills are to be employed whether the field be production or the environment. The owner must assume responsibility with regard to the training of employees. The contract between the owner and the exploitant must stipulate that employees have the necessary skills and have been informed about the conditions to be respected. (3)

See criterion 4.1.

FSC Criterion 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

- A minimum requirement is that management objectives and map materials be available for public consultation. The owner, for his or her part, may express reservations with regard to the felling and the regeneration plan. It is highly desirable that co-operation between the different parties concerned be achieved. (26)

Indicator 7.4.1 : A summary of the management plan is available to all interested parties.
Verifier : availability of information

FSC Principe 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.

FSC Criterion 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.

- The last stage of the planning cycle is monitoring and control. Each measure, is evaluated and assessed in order to establish the extent to which it corresponds to the general objectives to be achieved. If this contribution is inadequate, the measures and/or objectives will be revised. Assessment is adapted to the size, importance and nature of the area, the planned impact of the measures, and the importance of the management objectives. Relevant data are noted in such a way that they can easily be checked. (26)
- Revision takes into account the results of monitoring and control, recent scientific developments and technical innovations as well as changing social, economic or environmental circumstances. (27)

Indicator 8.1.1. : The forest manager / owner monitors the extent and details of management operations implemented, responses to such operations and any significant natural developments.

Such records are kept in a form that ensures that they are of use over the long-term and are passed on with the forest when the owners or managers change in the future.

Guideline : a template for monitoring can be found in Addendum 3

Verifier : monitoring documents

Indicator 8.1.2. : The level of detail and means of monitoring are appropriate to the size of the enterprise, the importance and nature of the area, the impact of the measures and the importance of the management objectives.

Verifier : monitoring documents

FSC Criterion 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**

- The last stage of the planning cycle is monitoring and control. Each measure, is evaluated and assessed in order to establish the extent to which it corresponds to the general objectives to be achieved. If this contribution is inadequate, the measures and/or objectives will be revised. Assessment is adapted to the size, importance and nature of the area, the planned impact of the measures, and the importance of the management objectives. Relevant data are noted in such a way that they can easily be checked. (26)

Indicator 8.2.1. : The following issues are monitored by the forest owner / manager :

- a) harvested yield
 - * yields of all forest products harvested are recorded
 - * see also 5.6
- b) growth rates, regeneration and condition of the forest (such as pests, diseases, evidence of soil compaction, erosion, ...)
- c) flora and fauna
 - * for rare, threatened and legally protected species, see also 6.2
- d) environmental and social impacts

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- * for social impact : see criterion 4.4
- * for environmental impact : see criterion 6.1.2
- e) costs, productivity and efficiency of forest management
 - * see also criterion 5.1

Guideline : template is added in Addendum 3

Verifier : monitoring documents

FSC Criterion 8.3.

Documentation shall be provided by the forest manager to enable monitoring and certifying organisations to trace each forest product from its origin, a process known as the “chain of custody”.

Indicator 8.3.1. : the forest owner has documented the harvesting and selling of the timber in such a way the products can be traced from the forest until the first point in the chain of custody (or until the forest road in the case of selling standing timber).

Guideline : The documentation of harvest and sale records the type of product, quantity, place of origin, date of harvest and transport, FSC licence number, next destiny and persons or organisations involved.

Verifier : check administration forest enterprise (such as data on harvest, contracts and invoices of contractors, transporters and buyers)

FSC Criterion 8.4.

The results of monitoring shall be incorporated into the implementation and revision 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. (27)

Indicator 8.4.1. : The revision of the management plan is taking into account the results of the monitoring.

Verifier : management plan, interview with forest owner / manager

FSC Criterion 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.

- A minimum requirement is that management objectives and map materials be available for public consultation. The owner, for his or her part, may express reservations with regard to the felling and the regeneration plan. It is highly desirable that co-operation between the different parties concerned be achieved. (26)

Indicator 8.5.1. : A summary of the monitoring activities will be made public.
Verifier : availability of information

FSC Principe 9 : Maintenance of high conservation value forests

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

FSC Criterion 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..

Indicator 9.1.1. : Representative examples of natural indigenous forest ecosystems and valuable forest types and forest development stages are preserved and managed according to their specific values.

Guideline : This refers to areas that have been indicated as such in government documents like “bosreservaten” (forest reserves) and “natuureservaten” (nature reserves).

Draft, 14/10/02

Verifier : management plan, field visit, interview with forest owner / manager, consultation with forest and nature administration, consultation with the Institute of Forestry and Game Management, contact with relevant stakeholders

Indicator 9.1.2. : Forest areas of major social or cultural significance, valuable traditional forest management types or areas of important scientific or educational significance are preserved and managed according to their specific values.

Guideline : This refers to areas of which the specific values are commonly recognised, like coppices, coppices with standards and wooded banks.

Verifier : management plan, field visit, interview with forest owner / manager, consultation with forest and nature administration, contact with relevant stakeholders

In law :

Implementing order concerning the management of forest reserves (BR)

Implementing order on the assessment of the regulations regarding designation or recognition, and the management of the forest reserves (FL)

Implementing order on the management of forest reserves (WAL)

FSC Criterion 9.2.

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

See under criterion 4.4

FSC Criterion 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.

Indicator 9.3.1. : Management objectives and management measures for high conservation value areas are explicitly geared to conserve the valuable aspects of these areas.

Verifier : management plan, field visit, interview with forest owner / manager, consultation with forest and nature administration, contact with relevant stakeholders

Draft, 14/10/02

In law :

Implementing order concerning the management of forest reserves (BR)

Implementing order on the assessment of the regulations regarding designation or recognition, and the management of the forest reserves (FL)

Implementing order on the management of forest reserves (WAL)

FSC Criterion 9.4

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

see under criterion 8.1.1 and 8.1.2

FSC Principe 10 : Plantations

Plantations shall be planned and managed in accordance with P&C 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.

FSC Criterion 10.1.

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

- For homogeneous plantations of poplar, Norway spruce, other non-indigenous species and Scots pine, there must be a transformation plan. This means that :
 1. In poplar plantations, a well-developed, closed and mixed under layer consisting 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.
 2. Within other plantations, the aim is for mixed stands which 30 % of the basal area or crown cover is 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 figure. 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 an uneven-aged and varied forest (in terms of species) can be developed. (23)(remark from FSC-Belgium: once this transformation is realised, we no longer consider these stands to be plantations, but semi-natural forests. It is clear from the structure of the Belgian standards, that all other requirements such as dead wood, old trees, % of area for pure indigenous stand and nature development, do apply to these plantation-in-transition- forests too)

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1. In poplar plantations, a well-developed, closed and mixed under layer consisting 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.
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(remark from FSC-Belgium: once this transformation is realised, we no longer consider these stands to be plantations, but semi-natural forests. It is clear from the structure of the Belgian standards, that all other requirements such as dead wood, old trees, % of area for pure indigenous stand and nature development, do apply to these plantation-in-transition- forests too)

Verifier : management plan, field visit

FSC Criterion 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

Addressed in Criterion 10.1

FSC Criterion 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.

Addressed in Criterion 10.1, see also 6.3.b

FSC Criterion 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

Addressed in Criterion 6.3.6 and 6.9.1

FSC Criterion 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

Addressed in Criterion 10.1 and 6.4

FSC Criterion 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

Addressed in Criterion 10.1, 6.5 and 6.3.12

FSC Criterion 10.7.

Measures shall be taken to prevent and minimise 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 fertilisers. Plantation management should make every effort to move away from chemical pesticides and fertilisers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7

Addressed in Criterion 10.1, 6.6 and 6.8

FSC Criterion 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 well-being) 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 of access.

Addressed in Criterion 10.1, 6.3.6, 4.4, 2.3, 6.1, 6.9

Draft, 14/10/02

FSC Criterion 10.9

Plantations established in areas converted from natural forest 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.

Addressed in criterion 6.10

Addendum 1

- (a) **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.
- (b) **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 and the increasement of the profitability 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.
- (c) **Conservation and protection of the environment.** The forest manager helps to ensure a healthy environment, for example, by conserving water resources, soils, the atmosphere and landscapes. In addition to a general obligation “to care for the environment”, this means that the forest manager 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.
- (d) **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 total surface, 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.
- (e) with the exception of activities which have already been foreseen in an approved management plan
- (f) The disadvantages clear cuts bring along can be described as denuded soil : exposition to the wind, sun and rain ; loss of nitrates through percolation : increased risk for soil erosion : and they oftenh lead to even-aged monospecific stands.
- (g) A forest ecosystem includes treeless areas, ponds and infrastructure which are found within the forest complex.

(h) 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.

(i) The forest manager takes the principle of “caring for nature” into account, as well as the stand still principle applied to biological diversity. This means that all existing natural elements must be protected.

(j)

(k) A reason why autochthonous provenances of indigenous species are preferred is that a large number of specialised organisms are dependent on indigenous species of trees, so that replacing them by exotics could disrupt the food chain and ultimately result in biological impoverishment.

(l) Dead wood and retention trees are important elements for biological diversity. The relationship between fallen and standing dead wood will evolve during the development of the stand. Shortly after exploitation, there is mainly fallen dead wood ; during the development of the stand, there will be gradually be proportionally more standing dead wood. The aim is not to actively increase the volume of dead wood (through topping, girdling, ...) in order to reach the target.

(m) **Drawing up a management plan.** The present criteria are written with the idea that there is a need for cooperation between forest owners. These criteria are as such 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 and that the implementation constitutes a valuable context for the evaluation of the various criteria. When assessing the forest management not all criteria must be fully or absolutely complied with at the moment of certification. 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.

(n) The management plan 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 the standing stock, the felling and regeneration plan, the accessibility-plan and eventually the reconversion plan. The maps are made in function of the other principles of the text.

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- e. **Monitoring and control.** The last stage of the planning cycle is monitoring and control. For every measure, his / her 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.

Addendum 2 : Glossary

native provenance of an indigenous tree or shrub species : a tree or shrub species which, since its spontaneous establishment, after the last ice age, has only naturally regenerated locally or which has artificially regenerated exclusively with local material.

stand : a surface of the forest with an equal treatment type, most of the time a surface of 1 - 3 ha, but maximum 5 ha.

indigenous tree or shrub species : tree or shrub species, which occur naturally in a certain region

clearcut : clearcut is defined as a felling of a stand, which leaves less than

- half of the volume with a minimum of 75 m³ / ha, in a stand with standards
- 40 % of the volume with a minimum of 25 m³ / ha, in a stand with coppice with standards (the coppice not included)

nature development : all the measures aimed at creating conditions for the development of or for the restoration of nature in a certain region

shelterwood system : a silvicultural system where a proportion of the trees of the old stand are felled within an area leaving some trees as tree source and shelter for natural regeneration. The seed trees are subsequently removed.

strip system : silvicultural system where the coupes take the form of quite narrow strips. The breadth of the surface of the strips equals 1 or 2 times the height of the canopy of the remaining stand

site-adapted tree species : a species which is adapted to the site, being an area described or defined by its biotic, climatic and soil conditions in relation to its capacity to produce vegetation

Addendum 3 : templates for monitoring

3.1. Monitoring

An issue which raises many concerns is the monitoring. This section is designed to provide some guidance on this complex issue.

What is monitoring ?

There are 2 broad types of monitoring : monitoring operations and monitoring the forest.

- Monitoring operations : checking that work is being carried out according to plan, and in accordance with requirements, such as the health and safety requirements
- Monitoring the forest : checking the condition of the forest

Although these different types of monitoring are focussed on different aspects of management, they are closely related, and in practice overlap.

Why monitor ?

Monitoring is a tool. It should let you know how well you are progressing towards your objectives and alert you to the unexpected.

Through monitoring, you will collect the information you need to review your plans in the light of experience. You will catch things that are going badly before they become a serious problem. You will be able to meet your objectives more cost-effectively and efficiently, and ultimately you will be able to manage your woodland better.

Where, what, why, when and how ?

The prospect of monitoring can be daunting. But you are not expected to record everything, from each and every incidence of butt rot in your ash trees to the population dynamics of rare beetles. This would be impossible.

Even if you do not have a formal monitoring system, you will already be doing a lot of monitoring, perhaps without even realising it. The advantage of formalising the system is that it will be more effective in the long run. By recording the results of your monitoring you will make them accessible when you come to review your management plan, and accessible to your successors who will be managing the forest in the future.

It is important, however, to think through what you actually need to monitor and why, when you should do it, and how it can best be done. That way you will save valuable time and other resources, and you will not feel overwhelmed by a need to monitor everything.

Source : The UK Woodland Assurance Scheme Guide to Certification.

3.2. Monitoring of the use of biological control agents

This template can be used in the monitoring of the use of biological control agents. Every time biological control agents are used, this template can be filled in.

Some guidelines before using biological control agents :

- Relevant authorities should be contacted prior to the use of biological control agents
- When treating infected parts of the forest, it is advisable to leave a part of the forest without a treatment as this will deliver vital information to the forest owner when evaluating the effectiveness of the treatment.

Name of person :			
Name of the product			
Reason for use			
Date of application			
Location where the product has been used			
Area treated			
Quantity used			
How is the product being applied ?			
	first monitoring	second monitoring	Third monitoring
Date of the monitoring			
Has the treatment been effective until now ?			
What is the difference with the infected parts of the forest which are not treated ?			

3.3. Monitoring of the use of pesticides

This template can be used in the monitoring of the use of pesticides. Every time pesticides are used, this template can be filled in.

Name of th person :			
Name of the product			
Reason for use			
Date of application			
Location where the product has been used			
Area treated			
Quantity used			
How is the product being applied ?			
	first monitoring	second monitoring	Third monitoring
Date of the monitoring			
Has the treatment been effective until now ?			

Addendum 4 : training and regulations regarding safety equipment

Veiligheidsvoorschriften voor veiligheidskledij :

- * Veiligheidshelm: CE EN 397
- * Gehoorbescherming: CE EN 352-3
- * Gelaatsbescherming: CE EN 1731 s
- * Veiligheidsschoeisel: CE EN 345-2
- * Veiligheidslaarsen: CE EN: 381-6
- * Veiligheidsbroek: CE EN 381-5
- * Veiligheidshandschoen: CE EN 420

Cursusaanbod EBG 2000-2001

Kettingzaag (12u) (Maximaal 6 personen):

Werking, onderhoud, veilig en verantwoord gebruik van de kettingzaag. Een minimum van 2 dagen is noodzakelijk. Voor mensen die bijna dagelijks met de kettingzaag werken is een opleiding van 5 dagen vereist. Hier wordt dan verder ingegaan op specifiek vellen van gevaarlijke bomen, werken met de handlier en hout onder spanning.

Bosmaaier (6u) (Maximaal 6 personen):

Identiek aan de kettingzaag. Omdat de bosmaaier eenvoudiger is en er geen specifieke technieken vereist zijn kan deze cursus vrij kort zijn.

Eénassige trekkers (maaibalk-motoculteur) (6u) (Maximaal 6 personen)

Deze cursus is bedoeld om meer informatie te verkrijgen over de werking en de veiligheid van een éénassige trekker. Het werktuig dat het meeste in combinatie met deze machine wordt gebruikt is de maaibalk en deze krijgt dus de meeste aandacht.

Trekkertechniek (6u)

Toelichting werking van de verschillende onderdelen en systemen van een (bosbouw)trekker. Waar dient het basisonderhoud uit te bestaan en wat kan zelf uitgevoerd worden. Dit is uitsluitend theorie. De praktijk kan eventueel in overleg worden bijgegeven.

Kleinschalige bosexploitatie (6u)

Theorie en praktijk van kleinschalige bosbeheerswerken: dunningen, kleine verjongingsgroepen e.d. Het aanleren van het werken met een lastpakker is het belangrijkste cursusonderdeel.

Snoeien (6u)

Draft, 14/10/02

In dit cursusonderdeel worden snoeitechnieken en snoeiwerken besproken die relevant zijn voor bosbomen. Komen aan bod: doelstellingen van het snoeien (groeicorrectie, toegankelijkheid, stamreiniging), snoeitechnieken, snoeitijdstip en algemene snoeiregels, verschillende snoeiwerken (begeleidingssnoei, sleunen, elitesnoei). Alhoewel het sterk toegespitst is op bosbouw zijn de algemene snoeiregels en technieken voor alle bomen hetzelfde. Het theoretische deel beslaat drie uren, gevolgd door drie uren praktijk. Kan natuurlijk uitgebreid worden men meer praktijk.

Planten (6u)

Het aanplanten van bomen in bosverband met mogelijke voorbereiding en beschermende maatregelen nadien.

Vogelkersbestrijding (6u)

Omdat de Amerikaanse vogelkers de verdere ontwikkeling van een bos vaak in de weg staat, gaat men over tot de bestrijding van deze soort. Deze bestrijding vergt echter een intensieve aanpak, eventueel met het gebruik van herbicides. Dit is echter niet zo vanzelfsprekend in een bos/ natuurgebied.

Bestandsbeheer (6u)

De cursusduur bedraagt 1 dag waarbij volgende onderwerpen aan bod komen:

De voormiddag omvat een theoretische sessie: uitvoeren van dunningen; basisprincipes opmeten van bomen en volumebepaling.

In de namiddag volgt een praktijkoefening: bepalen van enkele bestandsparameters, aanduiden van een dunning, bespreking resultaten.

Boonsoortenkennis

Deze cursus kan op maat worden gemaakt naar gelang het publiek, gaande van een korte beschrijving en herkenning van de meest courante bosbomen en struiken tot een uitgebreide cursus over alle inheemse bomen en struiken met hun specifieke eigenschappen en toepassingsmogelijkheden. In elk geval wordt er telkens een praktijk/ excursiesessie bij gegeven.

Ecologie (3u)

Volgende onderwerpen komen aan bod:

Bouwstenen van het leefmilieu en de samenhang, levensgemeenschappen, milieuvraagstukken, Bos als ecosysteem.

Faunabeheer (3 of 6u)

In het eerste deel worden de theoretische achtergronden van populatiedynamica, predator-prooi relaties en jacht toegelicht.

Hierna komen meer praktische toepassingen aan bod toegespitst op typische wildsoorten en/of bedreigde en te beschermen diersoorten.

Natuurtechnische milieubouw (3u)

De basisbegrippen mbt tot natuurtechniek, milieubouw en –ontwikkeling komen aan bod, evenals voorbeelden van natuurtechnische maatregelen bij een meer ecologische (her)inrichting en beheer van wegen en waterlopen.

Natuurbeheer (6u)

Draft, 14/10/02

Principes en achtergronden van het natuurbeheer in Vlaanderen, overzicht van de belangrijkste natuurbeheersmaatregelen: uitgangsprincipes, gevolgen, toepasbaarheid en praktische realisatie.

Vegetatiekunde (3 of 6u)

de belangrijkste (bos)plantengemeenschappen, hun soorten, patronen en processen worden overlopen.

Houtherkenning (6u)

Algemene kenmerken en eigenschappen van hout, herkenning van loof- en naaldhout.

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Formations offertes en Région Wallonne:

VALBOIS asbl

Depuis 1990, Valbois R.N. développe différentes formations professionnelles liées aux ressources naturelles et à destination de publics variés puisque celles-ci sont accessibles aux demandeurs d'emploi, au personnel en place dans les entreprises, au personnel ouvrier des administrations publiques, aux particuliers ...

Ces formations professionnelles résultent de partenariats mis en place avec des organismes de formation tels l'Institut d'Enseignement de Promotion Sociale de Libramont, le Forem, des fédérations professionnelles (Fédération Nationale des Scieries et Fédémar), le Fonds d'étude de recherche des scieries et industries connexes et les organisations syndicales.

Ces formations sont les suivantes :

1. affûteurs de scieries
2. ouvriers sylviculteurs
3. entretien et réparation des voiries
4. paveurs de rue – poseurs routiers polyvalents
5. maçonnerie

(www.valbois.org)

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Forêt Wallonne

Forêt wallonne organise des journées de vulgarisation de projet de recherches, ex: Gestion des lisières forestières

Société Royale Forestière de Belgique

Organise des journées de terrain et des formation pour ses membres (liste d'activités depuis 1996)

- Choix des essences forestières adaptées au sol (1 journée)
- L'éclaircie en peuplements résineux (1 journée)
- Mécanisation en forêt et la sylviculture du douglas (1 journée)
- La futaie contrôlée et l'équilibre forêt-gibier (1 journée)
- Les réserves forestières (1 journée)
- Les différentes techniques d'éclaircie (1 journée)
- L'éclaircie et l'élagage en résineux (1 journée)
- La sylviculture extensive
- La sylviculture du hêtre
- L'exploitation forestière et le cahier des charges (1 journée)
- Les pépinières forestières (1 journée)
- Le cahier des charges (1 journée)
- La plantation, les protections contre le gibier (1 journée)
- L'aptitude de l'essence à la station (1 journée)
- Forêt privée et biodiversité (1 journée)
- La gestion forestière (1 journée)
- Le douglas (1 journée)
- Journée de formation débroussailleuse
- Sylviculture du frêne (1 journée)
- L'éclaircie feuillue (1 journée)
- Formation à l'utilisation de la tronçonneuse (en collaboration avec Jeunes au Travail et la Commission Paritaire 146 pour les ouvriers forestiers).
- Sylviculture de l'aulne et gestion des fonds de vallée (1 journée)
- Le plan simple de gestion (1 journée)
- Création et méthodes d'entretien d'un reboisement (1 journée)
- Concilier production de bois et conservation de la nature (1 journée)
- L'amendement. Création de voiries (1 journée)
- La régénération naturelle de l'épicéa (1 journée)
- Techniques de vente et d'exploitation de bois sur pied (1 journée)
- Mérisier et chêne rouge d'Amérique (1 journée)
- Utilisation de plants forestier en godet (1 journée)
- Ecologie et sylviculture du mélèze (1 journée)

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- Natura 2000 (1 journée)
- Taille de formation et elagage des arbres forestier (1 journée)
- Formation à la pratique du martelage et estimation du bois sur pied
- Lisière forestière: intérêt et mise en valeur (1 journée)
- Conversion de futaie régulière en futaie irrégulière (1 journée)