

## COST Action E27

### Protected Forest Areas in Europe - Analysis and Harmonisation (PROFOR) Results, Conclusions and Recommendations

## Suggestions for Clarifying Protected Forest Area (PFA) Categories for Reporting Purposes

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based on the discussions in Working Group 2 of the COST Action E27

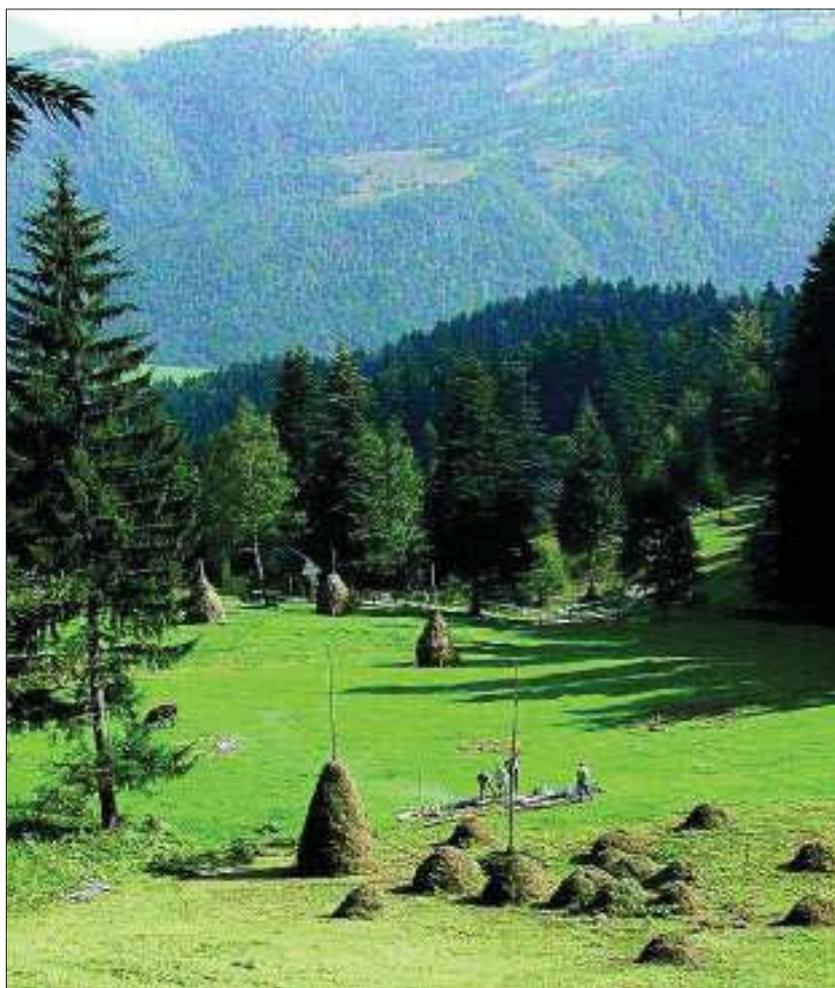
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*Photo: traditional hay-making in the buffer zone of Piatra Craiului National Park, Romania (Photo courtesy of Kris Vandekerkhove)*

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## 1. General remarks

This paper is based on the comparison of official statistics and results derived from the questionnaire circulated among the COST-Action E27 delegates, discussion ensued in COST-working group 2 'Harmonisation and improvement of information on European Protected Forest Areas – international dimension'. This resulted in a number of suggestions designed to improve the quality and comparability of the statistics that are derived from the two internationally endorsed systems for Protected (Forest) Areas, i.e.

- The Protected Area Management Categories of (IUCN, 1994), used (amongst others) in FRA 2000
- The MCPFE-Assessment Guidelines for PFA developed by the Vienna Liaison Unit of the Ministerial Conference on the protection of Forests in Europe (MCPFE, 2003).

The result of this work has been compiled in this paper.

Two COST Action E27-technical papers were also produced, which were designed to provide direct input to the IUCN and MCPFE processes. The technical paper relevant to the IUCN-classification system (Vandekerkhove (ed), 2004) was sent to the agency contracted by IUCN (i.e. Equilibrium) to produce a guidance paper on the use of IUCN Protected Area Categories for Forest Protected Areas' in the context of the IUCN project -'Speaking a Common Language' (Dudley & Phillips, 2006). The COST Action E27 technical paper with analysis and recommendations on reported figures and assessment guidelines for the reporting of PFAs using the MCPFE framework (Vandekerkhove et al. (eds.), 2005) was sent directly to the MCPFE Liaison Unit in Warsaw. After further editing and consultation, it accompanied the questionnaires for the MCPFE 2007 status assessment of Europe's forests, as an official MCPFE Information Document (Frank & Parviainen, 2006).

Before proceeding further, some important **preliminary remarks** are necessary:

- Both the IUCN system of Management Categories and the MCPFE Assessment Guidelines are considered in the context of classification of protection management intentions. It does not necessarily reflect the activities that are actually performed, allowed or tolerated in practise.
- Both classify management objectives and restrictions. They don't evaluate the actual quality and

conservation value of sites. Hence, a particular Class may include a wide range of forest types, with different degrees of naturalness (i.e. from pristine virgin forests to plantations) and varying biodiversity quality.

- Both classification systems (i.e. definitions, restrictions, etc.) are unlikely to be altered; they are internationally endorsed and widely accepted.

However, clarification and guidelines on the criteria that are used are required, when they are used for official PFA reporting purposes, in order to prevent ongoing discrepancies in interpretation. This paper attempts to provide guidance for more accurate interpretation thereby ensuring more harmonised assessments and reporting of PFAs, and in order to avoid current anomalies as a result of differences in interpretation.

## 2. Suggestions for the clarification of the reporting on statistics of PFAs in Europe when using IUCN-Categories on Protected Areas

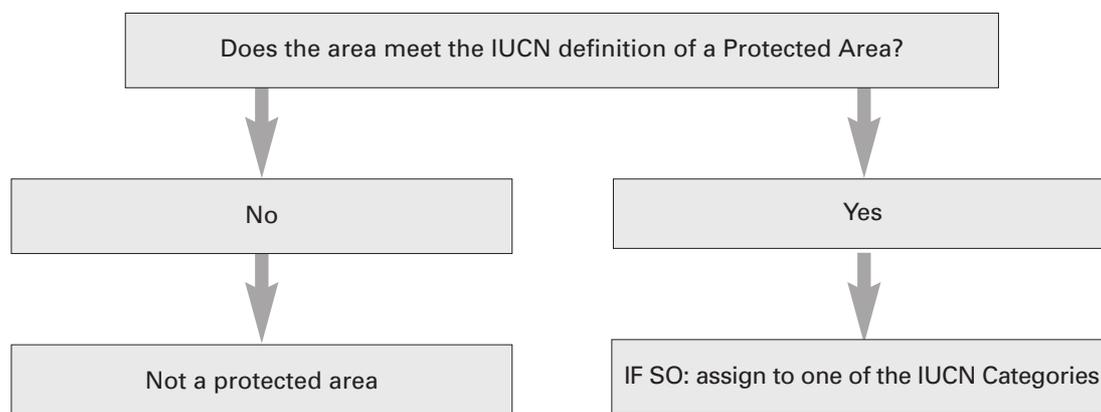
In this chapter, input from the country experts on the application of the Protected Area Management Categories developed by the International Union for Conservation of Nature (IUCN, 1994) for the reporting of statistics on PFAs is outlined. The primary objective is to provide better, more harmonised international statistics on PFAs.

### 2.1. Summary of the main results from the questionnaire

- Of the 23 questionnaires received, only 3 countries reported data for all 6 IUCN-Categories. In most European countries, only 2 or 3 Categories occur, and often none if the Categories are interpreted in their strictest sense.
- In general, many Protected Area types don't really comply with any Category, and are often allocated to one general Category (i.e. Category IV).
- Categories II and IV were the most commonly reported, together with Category I (although some correspondents were a bit reluctant to use Category I, as it is not very clear how strictly its criteria should be interpreted).

- 18 of the 23 correspondents stated that the IUCN-classification of Management Categories is too strict and confusing for correct implementation in their country. Almost all representatives (i.e. 20 of 23) had a lot of difficulty with the meaning of Category VI. Most delegates did not know how to deal with this Category at all. Moreover, some suggested that all the forest in their country - which is managed in a close-to-nature, sustainable manner - could fit comfortably into this Category.
  - Most correspondents were uneasy regarding the categorisation of PFAs with specific local protection regimes. The following problems were commonly mentioned:
    - There was much uncertainty regarding the size requirements for Protected Areas. The IUCN-guidelines state that a Protected Area should be 'large enough for the functional development of the ecosystem' (IUCN, 1994). However, no minimum area is imposed or suggested by IUCN.
    - Protective forests don't fit into the classification system at all; in some countries, they are assigned to IUCN Category VI, although they do not comply specifically with its definition and criteria. In other countries, they are simply not reported at all.
    - In many countries, numerous management guidelines and restrictions for conservation purposes are applied or even imposed in multifunctional forests. Some countries include such areas in Category VI, whilst others exclude them from the reported data.
    - The IUCN classification system does not take into consideration the zoning of Protected Areas, resulting in different parts of individual PFAs fitting into more than one Category. The guidelines (IUCN, 1994) suggest assigning sites to the Category that corresponds with the largest proportion of the site. On the other hand, the Interpretation guidelines for Europe (Europarc & IUCN, 2000) state that where 'Multiple Classifications' occur, the areas belonging to different Categories should be 'identified separately for accounting and reporting purposes'. This contradiction should be removed, as it has important consequences on the reported figures (e.g. : up to half of the 'non-intervention' area in a country may be covered by National Parks core areas, which should, in total, be reported in Category V).
    - There is uncertainty regarding the legal status for inclusion in the network, because of the expression 'or other effective means' in the general definition.
  - Some activities such as hunting, fishing and reindeer husbandry predominate as diagnostic characteristics of the IUCN Categories, even though they often have a marginal (or even positive) effect on the ecosystem. In many cases, the current management may well allow for classification in Categories with stricter management criteria (Category I or II), but due to the presence of reindeer husbandry or 'subsistence hunting' (e.g. for Saami people) or 'open access to public', they must be assigned to other Categories, e.g. all the Protected Areas in Northern Finland are classified in Category VI because of reindeer husbandry. Consequently, Category VI includes a wide array of very different national types of Protected Areas ranging from strict nature reserves and national parks to protected peatlands and wilderness areas.
  - Most correspondents concluded that the IUCN classification system appears to have been developed for continents and countries where large areas of pristine or natural landscape still persist. The system is more suitable for very large Protected Areas and does not readily allow for the assessment of small scale Protected Areas. It is too coarse for smaller areas, where due to the presence of population pressure, human impact is a factor in spite of protection measures and restrictions. Some of the IUCN- categories are therefore of limited use in Europe.
  - Moreover, the classification system is very much subject to variable interpretation, and causes a lot of confusion: the differences between different Categories are not always very clear.
- ## 2.2. Recommendations for additional guidelines for better application of IUCN Categories in European PFA reporting processes
- ### 2.2.1. General recommendations
- The IUCN Protected Area Management Categories were not specifically developed for the purpose of reporting statistics on PFAs in Europe, but to assist governments and others in designating protection areas for terrestrial and aquatic ecosystems.
- Clarification and an interpretative guide are required if this classification system is to be used for statistical purposes. Simply extrapolating the existent Categories to the protection regimes in European countries is not possible, and results in the production of very vague datasets that cannot be used with confidence for comparative purposes.

Much of the potential confusion about what is or is not a Forest Protected Areas can be avoided if the hierarchical nature of the definition is stressed, and the system applied sequentially. In short, the Categories are only applied if the area in question already meets the definition of a Protected Area. The process of assignment should begin with the IUCN definition of a Protected Area and then be further refined by reference to the IUCN Categories:



It follows that any area that appears to fit into one of the Categories based on a consideration of its management practices alone, but which does not meet the general definition of a Protected Area, should not be considered as Protected Area as defined by IUCN.

Figure 1:

Illustration of the hierarchy involved between the over-arching definition and Categories of Protected Areas in the IUCN guidelines for Protected Area Management Categories. (taken from Dudley & Phillips, 2006)

### 2.2.2. Stressing the hierarchy between the IUCN definition on Protected Areas and the Management Categories

It is important to stress as a prerequisite that all sites should comply with the over-arching IUCN definition on Protected Areas, inherent in Categories I-VI. No site can be considered to be a Protected Area unless it meets the over-arching definition which is defined as: *an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.*

Using this definition, IUCN further classifies Protected Areas into six Management Categories, ranging from strictly protected nature reserves to areas that combine biodiversity protection with a range of other functions, such as resource management and the protection of traditional human cultures.

According to IUCN all forests that don't have biodiversity conservation as their primary function

and objective should be excluded from reporting procedures on PFAs. This principle is clearly illustrated Fig. 1 (Dudley & Phillips, 2006).

If this prerequisite had been clearly stressed to the responsible national authorities at the outset of the TBFRA 2000 reporting process, this would have removed a lot of confusion, and would almost certainly have produced better, more comparable data.

The working group also endorses a strict interpretation of the overriding definition, i.e. forests (and in the wider sense all Protected Areas) reported in IUCN-Categories should always have conservation and enhancement of biodiversity/natural values as the primary goal. This should be guaranteed through legally binding, long term commitments, linked to national nature conservation programmes.

Hence, it should be emphasised at the outset that multifunctional forests should not be included in reporting statistics, even if nature conservation is of equal importance to other functions over the whole area, or even the main function in some parts of the

area (key biotopes, etc.) as they do not comply with the over-arching definition of IUCN Protected Areas. Multifunctional forestry means that all functions are equally important, with primary objectives to be fulfilled, which vary depending on location within the forest area. In some parts, an economic function will predominate, in others the recreational function, etc., and in specific areas (i.e. vulnerable sites, rare and key biotopes), the conservation function will pertain, ensuring that these key-biotopes will receive adequate management. This may involve non-intervention (i.e. patches of swamp forest), or a specific management regime such as mowing or grazing in patches of heathland within the forest. These key biotopes and their management are an integral part of multifunctional forestry, and should not be 'segregated' for the purposes of reporting in PFAs statistics.

Consequently, areas set aside under specific certification programmes (i.e. FSC - min 5% of the area) are not compatible with the over-arching definition set by IUCN. Certification programmes are voluntary and can be revoked at any time; they don't require any long-term commitment and therefore don't comply with the overall requirement of 'protected through legal or other effective means'. Moreover, they are an integral part of multifunctional forest management which qualify as a requirement of the certification body as 'good forest practice'.

### 2.2.3. Remarks relevant to the IUCN definition of a Protected Area

The working group expresses concern that the IUCN definition of a Protected Area loses some of its power and focus by including 'associated cultural resources', as this leaves it open to wide interpretation, resulting in the inclusion of all kinds of multi-functional and other site uses (be they traditional or otherwise).

The most important aspect to highlight is that it is quite unclear as to what should be included as 'legal or other effective means'. It follows that 'other means' need to be indefinite and stipulated in official documents (i.e. management plans, etc.). However, most management plans have a timeframe of 10-20 years, after which management practices and even management objectives may be altered or modified. Moreover, management plans are commonly considered to be 'supporting technical documents' that provide guidance to management though may not necessarily include clear and enforceable commitments.

In many countries conservation objectives are also encouraged through protective ownership, (e.g. conservation trusts or state and local authorities), conservation management grant schemes, management plans for designated sites, etc. It should be clarified whether these should be included as 'legal or other effective means'.

Regarding the 'legal basis' for inclusion in the reporting process, MCPFE Assessment Guidelines (see below) appear stricter than the IUCN system. Management plans alone are not considered to provide sufficient 'legal basis' for inclusion, as they are only an implementation tool toward the conservation objective. Inclusion of management plans can only occur if they are associated with an explicit, legally binding designation.

A similar situation arises with forests where grant schemes and other state incentives that focus on conservation and enhancement of biodiversity are applicable, provided an agreed management plan is implemented. Although they can be very effective in addressing biodiversity management requirements, they are essentially voluntary in the sense that owners are often not compelled to carry out every action stated in the management plan if they decide not to.

Therefore it would be useful for IUCN to produce a document that clearly defines the criteria that must be fulfilled in order to comply with 'legal or other effective means'.

### 2.2.4. Definition of size criteria for 'minimal area'

In the IUCN system it is stated that '*the areas should be large enough to allow the ecosystem to fully develop*' (IUCN, 1994). However, no guideline size criteria are provided as to the minimal area that should be considered. Potentially, every country may have its own interpretation of what this lower limit should be. This lower limit may not be absolute but dependent on local/ regional features or even site conditions.

Moreover, in densely populated areas, where valuable natural sites comprise small fragmented relics, there is little choice as to what the size of a protected site should be. The absence of clear guidelines on 'minimum size criteria' for sites is reported to be a major cause of uncertainty on the inclusion of certain national protection categories (e.g. strict forest reserves in many European countries apparently fulfil all other requirements of Category I, but are often smaller than 50 ha).

### 2.3. Using the UNECE/FAO definition of forest in combination with the IUCN definition of Protected Area to produce reliable and comparable statistics on PFAs in Europe

The UNECE/FAO definition of a 'forest' (FAO, 1998) is quite simple and straightforward :

*'Land with tree crown cover (or equivalent stocking level) of more than 10 percent and area of more than 0.5 ha. The trees should be able to reach a minimum height of 5 m at maturity in situ. It may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground, or open forest formations with a continuous vegetation cover in which tree crown cover exceeds 10 per cent. Young natural stands and all plantations established for forestry purposes which have yet to reach a crown density of 10 percent or tree height of 5 m are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention or natural causes but which are expected to revert to forest.'*

This definition may be criticised as inadequate for the purposes of biodiversity reporting since it doesn't make any difference between natural forest and plantation, but the criteria have considerable merit since:

- they are universal and widely accepted within the International forestry community
- they are very simple and unambiguous: although not always easy to measure, the criteria are clear and are not open to interpretation: 10% coverage; 0,5 ha; 20 m wide are universal measures.

In order to avoid any further confusion a strict and straightforward approach is recommended. The reported figures should be the simple intersect between boundaries of the officially Protected Area regimes, and the area of 'forest' defined according to FAO-definition (see also Chapter 6.2 of this volume). The working group rejects firmly the suggestion of a posteriori exclusion or inclusion of certain forests based on qualitative criteria or specific local objectives, as suggested in the WCPA Best Practice guidance paper on forests and Protected Areas (Dudley & Phillips, 2006).<sup>1</sup>

The Working Group stresses the importance of a fundamental principle in the development and application of the classification system, namely that

assignment is on the basis of the management objective, including levels of protection, restrictions on use, etc. The classification is thus made disregarding the actual ecological value of sites, or the effectiveness of implemented management objectives. This was also clearly outlined in the WCPA guidance paper (Dudley & Phillips, 2006). *'This means that candidate Protected Areas are assigned an IUCN Category according to the purposes set out in legislation, management plans or other means. They are neither determined according to the governance and management arrangements nor the ownership of land and water. Nor is the assignment a statement of the effectiveness of the management of the Protected Area. This rule applies to Forest Protected Areas just as much as to any other kind of Protected Area.'*

There are no compelling arguments to exclude certain types of forest from the reported data if the management intention is nature conservation. If a plantation is included in an IUCN Protected Area (i.e. as it fulfils the basic requirements of a Protected Area), it should consequently be reported in the statistics.

When a forest (be it a natural forest or a plantation) is managed for management objectives other than biological diversity, it should be excluded from the statistics of IUCN Protected Areas at the outset. Hence, any debate on excluding it afterwards when finalising statistics on forests will not arise.

In some cases, protected areas may include a minority of areas where other primary functions pertain (i.e. built up areas, roads, patches of arable land or forests that provide firewood for local communities). Excluding them from the total area would result in the area being broken up. Although they may have a low biological value, and be managed for other purposes, patches within Protected Areas should not be subtracted when delineating boundaries and reporting on the size of PAs, as they are considered crucial to the 'integrity' of the site. Therefore, a consistent approach should be adopted for forest stands with other primary functions and/or low biological value that are inside Protected Areas.

Another argument for adopting the straightforward approach recommended is the feasibility and practicality of same. Even if the restrictions within the current system are clarified and refined further in order to avoid divergent interpretation, it will be difficult to produce reliable data. For some countries

<sup>1</sup> In this document it is suggested to exclude planted forests that are managed for production which are present within the boundaries of a site that complies with the over-arching definition.

the most basic overlay of 'forest' with 'Protected Area' causes problems due to the lack of detailed information. As many countries don't have detailed statistics of the different classes of naturalness to be found in their Protected Areas, more complex and selective overlays will prove to be impossible or unreliable.

The production of detailed information as described should be a component of a separate assessment of the 'status' of Protected Areas. More detailed assessments of the status of forests within PAs will be possible when these datasets are available for the total area.

## 2.4 Recommendations for the specific IUCN Protected Area Management Categories

### Category Ia - Strict Nature Reserve: Protected Area managed mainly for science

#### *Definition*

*An area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring*

#### *Objectives of Management*

- to preserve habitats, ecosystems and species in as undisturbed a state as possible;
- to maintain genetic resources in a dynamic and evolutionary state;
- to maintain established ecological processes;
- to safeguard structural landscape features or rock exposures;
- to secure examples of the natural environment for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded;
- to minimise disturbance by careful planning and execution of research and other approved activities; and
- to limit public access.

#### *Guidance for Selection*

- The area should be large enough to ensure the integrity of its ecosystems and to accomplish the management objectives for which it is protected.
- The area should be significantly free of direct human intervention and capable of remaining so.
- The conservation of the area's biodiversity should be achievable through protection and not require substantial active management or habitat manipulation (c.f. Category IV).

### Issues requiring clarification

- What is the minimum area required?  
All over Europe there are many Strict Forest Reserves, which often represent the majority of non-intervention forests of the countries concerned. Their management objectives are in line with the IUCN Guidelines for Category Ia (IUCN, 1994), but they are often small. In most European countries, especially Central and Western European countries, these strict reserves have an area of approximately 30 – 300 ha; in some cases, especially in fragmented landscapes, they may be less than 30 ha. The Guidance for selection states that the 'area should be large enough to ensure integrity of its ecosystems and to accomplish the management objectives for which it is protected' (IUCN, 1994). The paper on Interpretation and Application of the IUCN Management Categories for Protected Areas in Europe states that 'the strictly protected research areas are generally not large enough to ensure the integrity of its ecosystems (most of them are smaller than 2000 ha)' (Europarc & IUCN, 2000). However, it is not clear whether this size limit is an absolute requirement for inclusion. If this is the case virtually no sites in Europe comply with Category Ia. The only Category that caters for smaller areas is Category III : natural monuments. However this Category appears to be focused on individual features rather than ecosystems.
- What possibility is there to intervene in cases of disturbance which may cause major catastrophes outside the PA (e.g. fire, insect outbreak)?  
In many European countries exceptional interventions are possible in order to prevent catastrophic events outside the area emanating from within. However, such interventions may only be authorised by the relevant authorities on a case-by-case basis. Interventions inside the area may occur if all alternative solutions prove ineffective, e.g. intervention failure in the buffer zone adjacent the PFA. Are these exceptional interventions acceptable in Category Ia or can intervention only occur in buffer zones surrounding it (which may belong to another Category)?
- Do 'future natural forests' (i.e. previously managed or man-made forests that are left to develop freely) comply with this Category? They are certainly not 'examples of the natural environment'. However, natural development and succession can be monitored in these areas. Should it be mandatory to elaborate on whether these are areas of native

woodland or otherwise? In conclusion, this is perceived as a qualitative criterion.

Clarification sought from consultants employed by IUCN confirmed that this Category is certainly intended for large undisturbed areas, where no intervention is allowed (i.e. extremely strict criteria). This Category was not developed for Europe but Southern Asia, North America and South America. However, in the current revision process, IUCN will look at extending this Category to allow strict European reserves to be included. (Nigel Dudley, pers. comm.). This is in line with the statement in the interpretation guidelines for Europe (Europarc & IUCN, 2000): *'in Europe, Categories Ia/Ib, III and VI especially are under-represented relative to other regions (...) It is desirable therefore to encourage the wider use of these Categories in particular.*

**CATEGORY Ib - Wilderness Area:  
Protected Area managed mainly for wilderness  
protection**

**Definition**

*Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.*

**Objectives of Management**

- to ensure that future generations have the opportunity to experience understanding and enjoyment of areas that have been largely undisturbed by human action over a long period of time;
- to maintain the essential natural attributes and qualities of the environment over the long term;
- to provide for public access at levels and of a type which will serve best the physical and spiritual well-being of visitors and maintain the wilderness qualities of the area for present and future generations; and
- to enable indigenous human communities living at low density and in balance with the available resources to maintain their lifestyle.

**Guidance for Selection**

- The area should possess high natural quality, be governed primarily by the forces of nature, with human disturbance substantially absent, and be likely to continue to display those attributes if managed as proposed.

- *The area should contain significant ecological, geological, physiogeographic, or other features of scientific, educational, scenic or historic value.*
- *The area should offer outstanding opportunities for solitude, enjoyed once the area has been reached, by simple, quiet, non-polluting and non-intrusive means of travel (i.e. non-motorised).*
- *The area should be of sufficient size to make practical such preservation and use.*

This Category was also developed with large wilderness areas in North America in mind, and is only relevant in Europe for very large National Parks in Nordic regions.

**Issues requiring clarification:**

(Europarc & IUCN, 2000) confirm this interpretation but state that Wilderness may include areas exploited for a limited period in the past, without the natural diversity of habitats and species being significantly altered, and which have been returned to natural succession. Former military areas that are left unmanaged might fit in, provided they are of considerable size. This new approach is currently under review, as this may require a change in the definition of this Category (Nigel Dudley (pers. comm.)). A new definition will need further clarification of terms (i.e. limited period, significantly altered, considerable size) to ensure unambiguous assignment of sites to this Category.

**CATEGORY II - National Park:  
Protected Area managed mainly for ecosystem  
protection and recreation**

**Definition**

*Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.*

**Objectives of Management**

- to protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational or tourist purposes;
- to perpetuate, in as natural a state as possible, representative examples of physiographic regions, biotic communities, genetic resources, and species, to provide ecological stability and diversity;

- *to manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will maintain the area in a natural or near natural state;*
- *to eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation;*
- *to maintain respect for the ecological, geomorphologic, sacred or aesthetic attributes which warranted designation; and*
- *to take into account the needs of indigenous people, including subsistence resource use, in so far as these will not adversely affect the other objectives of management.*

#### **Guidance for Selection**

- *The area should contain a representative sample of major natural regions, features or scenery, where plant and animal species, habitats and geomorphological sites are of special spiritual, scientific, educational, recreational and tourist significance.*
- *The area should be large enough to contain one or more entire ecosystems not materially altered by current human occupation or exploitation.*

The IUCN consultants confirmed that many National Parks in Europe do not meet the standards of Category II and should be included in Category IV or V. For example, managing invasive species will put such areas into Category IV, unless restoration management is clearly limited in time and extent (Europarc & IUCN, 2000).

Category II excludes exploitation or occupation as it is inimical to the objectives of the designation. Exploitation is excluded if it upsets the natural balance of the ecosystem. Traditional practices, e.g. hunting /fishing by indigenous people, are allowed. As a consequence of the requirements of this Category, i.e. 'natural' state of the site, and the exclusion of active management for conservation, very few sites in Europe comply. Only some of the larger 'core areas' or some national parks and reserves in Nordic countries fulfil the requirements.

#### **Issues requiring clarification:**

The IUCN should make it very clear that there is not a hierarchy within the classification system. To this end both positive and negative examples should be included for each Category. In other words a national park that complies with Categories IV or V may be more relevant in certain countries, but is not less valuable than a site that is in Category II.

The term 'natural' needs further clarification. It is defined as 'ecosystems where, since the industrial

revolution (1750), human impact has been no greater than that of any other native species, and has not affected the ecosystem's structure (IUCN, 1994). However, the European guidelines (Europarc & IUCN, 2000) also suggest that the term should also apply to areas where land use has ceased and natural succession is now underway.

Furthermore, a clear definition or explanation is needed of what is understood or meant by 'subsistence use by indigenous people'.

In the interests of clarity, a guidance paper from IUCN should include a glossary of all key terms that are currently open to interpretation.

#### **CATEGORY III - Natural Monument: Protected Area managed mainly for conservation of specific natural features**

##### **Definition**

- *Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.*
- *Objectives of Management*
- *to protect or preserve in perpetuity specific outstanding natural features because of their natural significance, unique or representational quality, and/or spiritual connotations;*
- *to an extent consistent with the foregoing objective, to provide opportunities for research, education, interpretation and public appreciation;*
- *to eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation; and*
- *to deliver to any resident population such benefits as are consistent with the other objectives of management.*

##### **Guidance for Selection**

- *The area should contain one or more features of outstanding significance (appropriate natural features include spectacular waterfalls, caves, craters, fossil beds, sand dunes and marine features, along with unique or representative fauna and flora; associated cultural features might include cave dwellings, cliff-top forts, archaeological sites, or natural sites which have heritage significance to indigenous peoples).*
- *The area should be large enough to protect the integrity of the feature and its immediately related surroundings.*

This Category is the smallest Category in terms of area. Remarkable/veteran trees may be included (although they have a limited lifespan). Man-made artefacts/monuments are normally excluded. The Category

includes spiritual sites, which may be small but very important, e.g. rag/prayer trees. This Category was developed to protect these areas by including them in larger areas thereby helping to increase biodiversity. Examples of areas that should be included are waterfalls, caves, craters sea cliffs and Karst landscapes.

### Issues requiring clarification

It should be clearly acknowledged if man-made 'semi-natural' aspects can be included. For example, specific landscape features that are the result of long-time human land-use such as Karst areas, remarkable trees that were planted or pollarded/pruned over time, patches of ancient coppice with standards, or wood pasture.

If man-made elements can be included, it should be clear to what extent the required degree of naturalness should be, e.g. in respect of patches of old semi-natural woodland or wood pasture. Many of these could fit either here or in Category IV depending on the naturalness data provided.

(Dudley & Phillips, 2006) state that 'harvesting is not an appropriate form of management in Categories I-III'. Does this imply that sites or parts thereof that require human interventions on a regular basis, or where regular restoration works occur, should be excluded? Examples of such sites are:

- Karst and Cliff areas that require regular removal of (native or exotic) invasive shrubs and trees.
- Regular removal or coppicing of trees and shrubs in order to conserve or improve views on scenic hilltops, castles, ruins and waterfalls
- Restoration of Karst-areas or Land dune areas by removal of pine plantations
- Old pollard trees that require regular tending and pruning

## CATEGORY IV - Habitat/Species Management Area: Protected Area managed mainly for conservation through management intervention

### Definition

*Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.*

### Objectives of Management

- *to secure and maintain the habitat conditions necessary to protect significant species, groups of species, biotic communities or physical features of the*

*environment where these require specific human manipulation for optimum management;*

- *to facilitate scientific research and environmental monitoring as primary activities associated with sustainable resource management;*
- *to develop limited areas for public education and appreciation of the characteristics of the habitats concerned and of the work of wildlife management;*
- *to eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation; and*
- *to deliver such benefits to people living within the designated area as are consistent with the other objectives of management.*

### Guidance for Selection

- *The area should play an important role in the protection of nature and the survival of species, (incorporating, as appropriate, breeding areas, wetlands, coral reefs, estuaries, grasslands, forests or spawning areas, including marine feeding beds).*
- *The area should be one where the protection of the habitat is essential to the well-being of nationally or locally-important flora, or to resident or migratory fauna.*
- *Conservation of these habitats and species should depend upon active intervention by the management authority, if necessary through habitat manipulation (c.f. Category Ia).*
- *The size of the area should depend on the habitat requirements of the species to be protected and may range from relatively small to very extensive.*

This Category is quite broad hence it may include virtually all Protected Areas in many European countries, from 'minimal intervention areas' to intensive active management, with some economic revenue such as hay, timber, etc. as side products. Most of the PFAs in Europe are included in this Category. This Category is probably the clearest one, although problems arise when management activities result in marketable 'economic goods'.

### Issues requiring clarification:

In order to avoid confusion with Categories I and II, it should be made clear what timeframe is acceptable for restoration works, or to what extent exceptional interventions (in case of catastrophes) or minimum interventions (such as the periodic removal of seedlings of invasive species) are allowed in Categories I & II. Depending on the strictness of these guidelines, more PFAs may be classified in Category IV, I or II.

A lack of definition and/or examples for this Category may lead to difficulties in interpretation, especially when management aims to conserve certain natural values linked to ancient management techniques, (such as wood pasture or coppice with standards) or where typical forestry techniques of stand transformation occur. Hence, the actual management may be very similar or even identical to some of the practices carried out in multifunctional forests.

In order to prevent the wrongful inclusion of multifunctional forests, the relationship to the over-riding general definition should be clearly stated. The management objective is the basic determinant here; all management is carried out in order to fulfil clearly predefined nature conservation goals.

In order to fulfil these goals, some marketable goods may be produced (e.g. wood, meat, hay, etc.), as a means to this end, but they should not be the primary objective.

#### **IUCN Category V - Protected Landscape/Seascape: Protected Area managed mainly for landscape/seascape conservation and recreation**

##### **Definition**

- *Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.*
- **Objectives of Management**
- *to maintain the harmonious interaction of nature and culture through the protection of landscape and/or seascape and the continuation of traditional land uses, building practices and social and cultural manifestations;*
- *to support lifestyles and economic activities which are in harmony with nature and the preservation of the social and cultural fabric of the communities concerned;*
- *to maintain the diversity of landscape and habitat, and of associated species and ecosystems;*
- *to eliminate where necessary, and thereafter prevent, land uses and activities which are inappropriate in scale and/or character;*
- *to provide opportunities for public enjoyment through recreation and tourism appropriate in type and scale to the essential qualities of the areas;*
- *to encourage scientific and educational activities which will contribute to the long term well-being of*

*resident populations and to the development of public support for the environmental protection of such areas; and*

- *to bring benefits to, and to contribute to the welfare of, the local community through the provision of natural products (such as forest and fisheries products) and services (such as clean water or income derived from sustainable forms of tourism).*

##### **Guidance for Selection**

- *The area should possess a landscape and/or coastal and island seascape of high scenic quality, with diverse associated habitats, flora and fauna along with manifestations of unique or traditional land-use patterns and social organisations as evidenced in human settlements and local customs, livelihoods, and beliefs.*
- *The area should provide opportunities for public enjoyment through recreation and tourism within its normal lifestyle and economic activities*

For this and the next Category there is a thin line between 'conservation area' and sustainable multi-functional use of natural resources. IUCN acknowledges that misuse of this Category is common (IUCN, 1994).

It is suggested that in Europe it is virtually always, the regional nature parks, nature parks, regional parks as well as many national parks which belong in this Category (Europarc & IUCN, 2000). It should be clearly emphasised that they do comply 'as long as they adhere to the IUCN definition of a Protected Area'.

Areas have been incorrectly classified to Category V even though they do not meet this basic IUCN definition of a Protected Area.

##### **Issues requiring clarification**

###### ***Nature conservation or landscape protection***

The definition of Category V causes considerable confusion, as there is a contradiction with the over-arching general definition. The definition of Category V is 'an area managed mainly for landscape conservation or recreation' while the over-arching definition states that the area should be 'especially dedicated to the protection and maintenance of biological diversity (...)'. What is the primary function of this Category, biodiversity or landscape protection?

In order to address this contradiction, the working group suggest that for a Category V site emphasis be placed on the requirement that it be 'officially

protected with the primary objective being conservation of biodiversity', and that the way to realise this conservation goal is through the conservation of the current landscape configuration. The hypothesis in this case is that historic management of the site has led to a landscape with important conservation values, which should be maintained through the continuation of traditional use patterns. This clearly differs from the MCPFE Category 2 (see below) where the main management requirement is the protection of the landscape, primarily for aesthetic and/or cultural reasons, without a specific primary conservation objective (although these sites may also have important biological values).

Indeed, when clarifying Categories V and VI (and in fact all Categories), a lot of confusion could be avoided by excluding any reference to its current naturalness status. The biological value, or naturalness of a site is no basis for inclusion or exclusion of sites in IUCN Protected Area Management Categories; indeed some multi-functional forests will have much higher biological values than many of the IUCN-classified sites.

The European guidelines (Europarc & IUCN, 2000) state that 'In order to fulfil the management objectives, **a significant part of this type of area should primarily be managed for conservation purposes.** The inclusion of many areas depends on how strictly the prerequisite 'a significant part of this type of area should primarily be managed for conservation purposes' is interpreted. What % area is significant and the term 'primarily' requires quantification (i.e. do both strict nature reserve and multifunctional forest with nature protection or conservation of a specific species as the primary objective comply?).

In many countries initiatives are taken in certain rural areas (i.e. sometimes called 'national park' or 'regional park' or 'natural park') where the promotion of a sustainable combination of recreation and multifunctional use of the landscape is the objective, with specific conservation aspects and goals included, even though it is not always the primary objective. Depending on the answers received, the total area in this Category will vary greatly (from tens of thousands of ha to 0 ha).

## CATEGORY VI - Managed Resource Protected Area: Protected Area managed mainly for the sustainable use of natural ecosystems

### Definition

- *Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.*
- *Objectives of Management*
- *to protect and maintain the biological diversity and other natural values of the area in the long term;*
- *to promote sound management practices for sustainable production purposes;*
- *to protect the natural resource base from being alienated for other land-use purposes that would be detrimental to the area's biological diversity; and*
- *to contribute to regional and national development.*

### Guidance for Selection

- *The area should be at least two-thirds in a natural condition, although it may also contain limited areas of modified ecosystems; large commercial plantations would not be appropriate for inclusion.*
- *The area should be large enough to absorb sustainable resource uses without detriment to its overall long-term natural values.*

This Category was designed for vast natural areas with limited human pressure (i.e. Amazon and Congo Basin) and does not apply readily to the European Continent. Zoning is extremely important in these areas. This Category recognises the importance of cultural and social values and allows native communities to be sustained via exploitation of natural resources, e.g. rubber tapping is permitted in the Protected Forest Area (Nigel Dudley, pers. comm.) Further advice on category VI suggests that 'large commercial plantations are not to be included and a management authority must be in place' (IUCN, 1994).

The areas to which it might apply most readily in Europe include some parts of Scandinavia, including those inhabited by the Saami people (Europarc & IUCN, 2000).

For the purposes of PFA statistics, all COST Action E27 correspondents reported that this Category was very problematic. It is very unclear what should be included. Do semi-natural forests managed under close-to-nature silvicultural systems, or forests in EU designated areas (under the Habitats Directive)

comply? What about silvi-pastoral systems in the Mediterranean basin, providing subsistence to local communities in a landscape that has been significantly altered by man in ancient times but remained relatively unaltered since?

### Issues requiring clarification

Category VI was developed for 'natural systems' and requires at least two-thirds of the area to be 'in a natural condition'. It is unclear how strict this requirement should be interpreted as there are virtually no 'natural systems' left in Europe. Indeed, in Europe there is a continuous gradient from artificial monocultures to even aged and semi-natural and near-to-natural forests to small patches of undisturbed natural forest. Clear instructions are needed in order to clarify the degree of human interference that is acceptable for a forest to be considered to be 'in natural condition'. Moreover, this again is an evaluation of 'current condition and quality', not of management intentions.

The Working group suggests that in order to prevent misuse of Category VI, it is important to stress that a Category VI site is always connected to other Management Categories, i.e. Categories I-IV, together forming one functional entity, in which the area classed in Categories I-IV cover at least 2/3 of the whole entity. In this regard, areas in Europe such as buffer areas of Sumava national park or Bayerischer Wald national park where large areas of planted spruce stands are included in the core as well as in the buffer zone of the park can be assigned to Category VI.

In addition, the size of area required to support sustainable uses without loss of natural values is not easy to determine; a strict interpretation would infer that European fragmented forest remnants are highly un-natural and would need to be linked together to increase naturalness before they could be included.

Correspondents suggest to clearly, define and explain what is required here. If this is not addressed, this Category will be widely misinterpreted, leading to unreliable and incomparable datasets.

As currently defined, countries where the majority of the forests have semi-natural status co-incident with sustainable management plans (cf Nordic countries) interpret this Category widely, and include all their forests, rendering it nonsensical.

This Category is also the only one where it is clearly stated that revenue and resources can be obtained from the forest. It should be very clearly defined when 'harvest' or 'exploitation' is considered part of a conservation strategy (i.e. Category VI). It should be clearly demarcated from sustainable multi-

functional forest management (i.e. outside the scope of classification). This is especially difficult for sites that are undergoing a transformation process from an artificial to a more natural forest where the ultimate objective is to install a Protected Area.

### 3. Analyses and suggestions from COST-Action E27 regarding clarification on the use of the MCPFE Assessment Guidelines for Protected and Protective Forest and Other Wooded Land in Europe

In this chapter, input from the COST Action E27 country experts is provided on the use of the MCPFE-Assessment Guidelines for PFAs, developed by the Vienna Liaison Unit of the Ministerial Conference on the Protection of Forests in Europe (MCPFE, 2003a) in the context of generating more harmonised international statistics on PFAs. Many of the suggestions of the working group were addressed in the MCPFE Information Document (Frank & Parviainen, 2006) that accompanied the questionnaires of the MCPFE 2007 assessment on the status of Europe's forests.

#### 3.1. Analyses

As stated previously, the MCPFE Assessment Guidelines were generally better appreciated by Cost Action E27 country representatives for reporting on PFAs, as it is better adapted to the European situation, and was specifically developed for reporting purposes.

Most correspondents stated that the MCPFE classification system addressed - in a more precise and well-balanced way - the different protection regimes in their country. For most correspondents, it was easier to assign the different national protection categories to the MCPFE Classes.

Although very few countries reported data for all Classes, most Classes are represented in the majority of countries. Class 1.1 was most problematic; although many countries reported figures for this Class, it was clearly stated that, if interpreted in the strictest manner, Class 1.1 does not occur anywhere in Europe (i.e. in 10 out of 11 replies).

Explicit designation in the context of the MCPFE Assessment Guidelines comprises both designations defining forest and other wooded land within fixed

geographical boundaries delineating a specific area as well as designations defining forest and other wooded land not within fixed geographical boundaries, but as specific forest types or vertical and horizontal zones in the landscape. This ‘zonal delineation’ was only relevant to a few countries and depended very much on how it was interpreted. For these countries however, they are considered a very valuable tool to report specific PFAs (e.g. Protection of *Quercus rotundifolia* – forests in Portugal, or Birch forests in Norway).

None of the Cost correspondents reported problems regarding the assignment of the national PFAs to any one of the Classes in particular. However, as with the IUCN-Categories, some countries encountered problems with areas where conservation actions/management restrictions within commercial forestry (i.e. multifunctional forests; Natura 2000-sites) pertain.

For protection regimes without a strict legal basis (i.e. protective ownership, voluntary programmes, etc.) MCPFE encourages reporting of these, though separate from the official data on legally designated PFAs.

### 3.2 Issues requiring improvement and clarification of the classification system in order to produce more harmonised datasets on PFAs in Europe

As the MCPFE assessment guidelines are specifically developed for the European situation, most correspondents found it easier to assign the different national protection categories to MCPFE Classes. However, as outlined in the previous chapter, this has produced a false feeling of ‘certainty’, as the reported figures are almost as divergent as for TBFA 2000. Indeed, as previously stated, correspondents sometimes felt quite unsure when filling in the data; just like in TBFA, they concluded that even minor differences in interpretation can lead to hugely divergent datasets. Therefore, more clarification is needed regarding the different Classes and harmonisation of reported data is necessary in order to render them comparable.

#### 3.2.1. General principles: strictness of the ‘legally binding’ status of the site

##### *General principles*

*“Protected and protective forest and other wooded land have to comply with the following general principles in*

*order to be assigned according to the MCPFE Assessment Guidelines:*<sup>2</sup>

- *Existence of legal basis*
- *Long term commitment (minimum 20 years)*
- *Explicit designation for the protection of biodiversity, landscapes and specific natural elements or protective functions of forest and other wooded land “Explicit designation” in the context of these guidelines comprises both:*
  - *Designations defining forest and other wooded land within fixed geographical boundaries delineating a specific area*
  - *Designations defining forest and other wooded land not within fixed geographical boundaries, but as specific forest types or vertical and horizontal zones in the landscape”*

*Data on forest and other wooded land according to these two designation types should be distinguished in the reporting.*

##### *Issues requiring clarification*

1. It should be made clear that all of the general principles need to be fulfilled in order to comply (and not only one or some of them). Also, as for the IUCN Categories, the strict hierarchy between the ‘general principles’ and the Classes of protection and protective forest should be clearly stressed. Only sites that comply with the ‘general principles’ are eligible for classification in one of the subordinate Classes.
2. A clear criterion on ‘Minimal size’ for all Classes is required, or alternatively, if none is considered necessary, this should be made clear (see also definition of ‘forest’).
3. There is confusion on the strictness of the term ‘legal basis’; all management regimes/plans and restrictions in forests are directly or indirectly linked to forest or nature conservation legislation, hence very wide interpretation is possible. Also the strictness of an ‘explicit designation’ is open to interpretation. In particular, it is unclear how management plans comply within this context.

*The working group suggests clarification of the ‘general principles’ as follows:*

All protected/protective areas must have a legal and permanent status of protection (i.e. governmental decree under nature conservation Acts, laws or statutes, forestry Acts, laws or statutes), or official

<sup>2</sup> MCPFE Assessment Guidelines for Protected and Protective Forest and Other Wooded Land in Europe, MCPFE (2003)

written contracts between state authorities and forest owners. The single Protected Area (name) or groups of areas (protected habitats) should be mentioned in the national/regional legal documents. Other means for protection should be considered as voluntary contributions toward protection.

A *management plan* is a prerequisite for any site to be included in national PFA datasets, but is *not sufficient to be recognised as an 'explicit designation'* on its own. Management plans are considered to be technical executive documents. They must be linked to a higher level of commitment, i.e. an Act or contract, underpinning this management plan and referring explicitly to the area in question.

By including both positive and negative examples in an additional technical guideline, much of this confusion could be avoided. Some specific examples are suggested by the WG:

**Examples of what should be included:**

- All 'conservation areas' *sensu stricto*: these are sites that have an official and permanent (*ad infinitum*) status of protection (i.e. nature reserve, national park, etc.)
- Also included are:
  - Private nature reserves, recognised by the state: recognition is by official legal status (e.g. 'recognised nature reserve') connected to an explicit legal instrument or document of recognition (i.e. Act, ministerial decision). This recognition is linked in contract format with management commitments for time periods of at least 20 years
  - Areas that are explicitly and legally designated, for example 'a forest with protective forest designation. These must have received explicit designation through a specific Act or Ministerial Decision. In this context, a management plan alone is not considered to be sufficiently explicit.

**Examples of what should not be included:**

- All forms of 'voluntary' conservation and protection initiatives, (e.g. protected ownership, sites owned or 'leased' for extended periods by private or state nature conservation bodies, but with no 'official' protection status), *incentive programmes* for biodiversity/groundwater protection, etc. (e.g. areas of forest subject to forest biodiversity conservation grant schemes). These are generally short-term contracts that often lack binding commitments on the owner or follow up measures to ensure binding conditions are implemented. In

addition, the owner may break the contract if he or she decides to do so.

- *Key-biotopes and conservation zones delineated within the framework of forest certification* programmes; these are not linked to long term commitments and legally binding Acts; moreover, they are considered part of multifunctional management required for certification. If certification is revoked, there is no obligation on the owner to continue with previously agreed management commitments.
- Areas of conservation and/or areas of protective forest *delineated only in management plans*. Management plans are considered to be technical executive documents. They provide guidance to the manager but are quite flexible in their application. In some countries however, they may be legally binding, and are thus legal instruments, but most have too short a timeframe. If such delineations in management plans are not linked to long term contracts or legal Acts that are specifically made to ensure that the main management objectives are met, they can only be considered to be 'voluntary initiatives' by local managers or administrations.
- Forest areas within the boundaries of national or international 'official' networks (e.g. *Natura 2000*, *National Ecological Network*, etc.). In some countries Natura 2000 sites coincide with national protection categories (national parks, reserves, etc.). In such cases these sites should be included in national PFA datasets. However, in many countries, Natura 2000-status does not impose a primary management objective for protection or protective forest, but allows the continuation of multifunctional and economic management, as long as it does not contravene the conservation objectives set out in the Birds and Habitats Directives. Therefore, Natura 2000 sites do not fulfil the basic requirements of the general principles and conditions, and hence should be excluded from the reporting procedure, even if extra restrictions are imposed on the owner for conservation of biodiversity or protective criteria. Individual sites that are also protected under national legislation for nature or landscape conservation can be assigned. Since management activities in these individual sites may vary from 'free development without any intervention' to 'intensive restoration measures', the categorisation according to the specific Classes must be decided for each individual site using the normal assessment procedures.

For designated forests with no fixed boundaries, it should be clear that ‘management plans’, or ‘general guidelines for forest management’ are not sufficient ‘on their own’ to warrant inclusion, but are an integral part of good sustainable forest management:

- national forest Acts may impose restrictions on the choice of tree species or harvesting methods (e.g. clearfelling) along streams, in watershed areas or on slopes greater than 30°
- national legislation may forbid the exploitation of certain forest types (e.g. birch forest at the timber line, etc.).

However, conservation or protective function objectives linked to these guidelines are not enough on their own to qualify for inclusion.

Many of the situations mentioned above do however comply with ‘voluntary contributions’ as mentioned in the assessment guidelines, and can be reported separately, i.e.

*“In addition to the regimes complying with these principles, the MCPFE takes account of protected and protective forest and other wooded land based on voluntary contributions without legal basis. As far as possible, these forests and other wooded lands should be assigned to the same Classes as used for the legally based regimes. However, data on these forests and other wooded lands should be compiled separately”.*

The working group presumes that this ‘strict’ and ‘exclusive’ segregated approach will almost certainly produce more comparable data.

However, this doesn’t confer any ‘valuation’ judgement as a result of sites being included or excluded; as in IUCN, some excluded sites or types of protection may have a much higher impact or effectiveness regarding the conservation of biodiversity in forests compared to sites that are included.

### 3.2.2. MCPFE designations ‘not within fixed boundaries’: forest types or vertical/horizontal zones

Explicit designation in the context of the ‘general principles’ of the Assessment guidelines includes both designations within fixed geographical boundaries and designations that are not within fixed boundaries but are specific forest types or vertical and horizontal zones in the landscape.

Some countries did not include any forest in this rather ‘vague’ Class while other countries did find this a very useful type (e.g. Cork and *Rotundifolia* oak stands in Portugal, Ancient Semi-Natural Woodlands outside designated areas in the UK, protective

mountain birch forest in Norway, etc.). It is debateable, however, how much these reported Classes comply with the general principles as sites outside officially designated areas’ are sometimes reported here. Divergent interpretation and reporting is inevitable if the general principles are not strictly applied.

### Issues requiring clarification

There are differences in the interpretation of how explicit the main management objective should be, e.g. in Sweden and Norway similar regimes exist for protective mountain birch areas. Norway did report these areas, however, Sweden did not as their designation is not sufficiently explicit for conservation or protective functions. Therefore, it should be clearly stated that the prerequisites for inclusion are as strict as for MCPFE types ‘within fixed boundaries-designations’. The only difference is that the demarcation of the area is not made on a map, but in a descriptive way, referring to specific forest types or vertical and horizontal zones in the landscape.

### 3.2.3. Definition of ‘Forest’ to be used in data collection

Some Protected Areas include both forest and open areas; to date, it is unclear what land cover should be reported. The working group suggests a strict and straightforward approach; the reported figures should be the simple intersect between boundaries of the officially Protected Area and protective regimes, and the area of ‘forest’. In this regard, common definitions of ‘forest’ and ‘other wooded land’ are also required, in order to produce comparable data. The UNECE/FAO definitions of a ‘forest’ and ‘other wooded land’ (FAO, 1998) provide straightforward criteria, but is quite general, (i.e. crown cover > 10%; >5m high for forest >5m for other wooded land, area > 0,5 ha, width > 20m; land predominantly used for agricultural practices is excluded). Individual country definitions and national statistics on PFAs can be much more restrictive. At national level some land cover areas that comply with the FAO definition are not considered as forest *sensu stricto* (e.g. mires and heathlands with dispersed trees, non-productive forest such as dwarf birch stands at the timberline).

### Suggestion of the WG:

It is suggested that a common definition of forest (preferably the FAO-definition) is used by all countries. If this is considered unrealistic (because it would impose new procedures in the calculation of national statistics) the country correspondents that

use alternative definitions should state what definition of 'forest' and 'other wooded land' was used in the production of their national statistics on PFAs, and provide an estimation of the potential difference if the FAO definition were used.

Results will also depend on how the data is sourced, e.g. satellite data vs. terrestrial surveys. Methodology should also be reported by country correspondents.

However, in order to achieve comparable data, a common use of definition and level of detail in the calculation and acquisition of the data is required.

### 3.2.4. Clarification on activities allowed and management restrictions that apply in the assessment guidelines

With respect to the activities allowed and restrictions that apply to the different Classes, discussions within the working group concluded that it is virtually impossible to apply general standards and criteria for the whole of Europe for certain activities, as their impact is completely different depending on where they are applied, e.g. commercial berry and mushroom picking is allowed in National Parks in Finland, but has no negative impact on the site, as the areas are remote and the intensity of exploitation is minimal. In Central, Western and Southern Europe however, commercial mushroom and berry picking can be a significant problem, and is often restricted, even in multifunctional forests.

Therefore, instead of trying to formulate general standards, this paper will only highlight the topics that need clarification or which are open to multiple interpretations. Suggestions are made based on specific examples.

#### MCPFE Class 1: Main Management Objective "Biodiversity"

##### Issues requiring clarification

#### *A further explanatory introduction to MCPFE Class 1 is suggested:*

The main management objective is the conservation and further enhancement of Biodiversity, in all its different aspects as defined in the universally endorsed definition of Biodiversity, formulated in the Convention on Biological Diversity (Anon., 1992):

*"Biological diversity" means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and*

*the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.*

Conservation of biodiversity in forests may include the conservation of rare genetic resources, protection of species and ecosystems, but also of natural processes.

It is clear that all aspects of biodiversity cannot be fulfilled to their full extent in the same place at the same time. The enhancement of one aspect may lead to a decrease of another, e.g. choosing the option of non-intervention in forests will in the long run lead to a more natural and richer ecosystem, but may lead to a temporary decrease in species richness.

It should also be clear that there is no value ranking order between Classes 1.1 to 1.3: these Classes are complementary (i.e. both strict and managed Protected Areas are required for the conservation of biodiversity).

#### MCPFE 1.1: No Active Intervention

##### *Guidelines*

- *the main management objective is biodiversity*
- *no active, direct human intervention is taking place*
- *activities other than limited public access and non-destructive research non-detrimental to the management objective are prevented in the Protected Area*

##### Issues requiring clarification

#### *No active direct human intervention:*

From the replies of country correspondents, the conclusion is drawn that - when interpreted in its strictest sense - there are no areas in Europe that comply with this Class. This is because there must always be the possibility of intervention where emergencies occur. This conclusion is also in accordance with the COST E 4 report on Strict forest reserves in Europe (Parviainen et al, 2000).

It is therefore suggested that a specific addendum be added to the technical interpretation of Class 1.1: In Class 1.1 the main objective is the safeguarding of natural processes to their full extent. This means that no intervention should take place, even if this might cause temporal decline of certain species or habitats, due to natural fluctuations or natural calamities (i.e. fire, inundation, etc.). However, exceptional interventions may be necessary, and therefore allowed in order to prevent catastrophic events outside the area

emanating from within. Such interventions may be authorised by the relevant authorities only on a case-by-case basis. Interventions inside Class 1.1 areas may only occur if all alternative solutions prove ineffective, e.g. intervention failure in the buffer zone adjacent the PFA. This excludes intervention to prevent or change spontaneous development in the reserve, even if these might cause a collapse of the area itself. (e.g. curative intervention to combat 'biotic disruptions', especially pest outbreaks).'

#### **Limited public access:**

The impact of access restrictions can vary greatly depending on local access regimes applied in different countries. If interpreted as 'only access on foot on existent public tracks', this excludes many of the 'strict reserves' in countries where a 'right to roam' exists. However, in other countries this would impose no additional restrictions where, in public forests, access is also limited to existing public tracks.

Also, the impact of 'public access' on the site is very much dependent on:

- local public pressure (remote, sparsely populated area vs. densely populated area)
- vulnerability of the site to human disruption (trampling, fire risk, etc.)

Therefore, it is almost impossible to formulate standard guidelines on access restrictions.

It should be clearly stated that the recreational function is secondary to the scientific and conservation function; public access is not completely restricted, but can only be allowed in so far as it does not in any way contravene the main biodiversity objective (spontaneous development) of the site.

This may imply :

- access on a limited number of existent pathways (or even a 'right to roam' in remote, less vulnerable sites),
- no 'safety measures' (e.g. felling of dangerous trees along tracks) or 'public promotion' of the area;
- minimal maintenance of the access paths is permissible (e.g. removal of logs off pathways into the forest).

#### **Non-destructive scientific research:**

It should be defined to what extent scientific activity is considered as not having an adverse impact on natural processes:

e.g. surveys of saproxylic invertebrates may require capture (and killing) of large numbers of individuals,

the temporary or permanent removal of logs (i.e. for incubation); cutting or carving of trees for the placement of trapping devices, 'fogging' of tree crowns, tree ring analysis may require boring or felling of sample trees, soil studies may imply boring and removal of soil samples; digging of 'profile pits', etc.

The following points are suggested:

Permissible activities include scientific sampling in so far as it does not adversely impact the populations of sampled organisms:

- the numbers of sampled individuals fall within the range of natural population fluctuations, e.g. invertebrate inventories using trap devices or collection of seeds for scientific purpose - not as a seed supply/seed resource; mushroom picking for identification, not for consumption, etc.
- The sampling methods only disturb the site to a very limited extent; removal of soil samples, making bore-holes, temporary removal of logs, etc.

All other interventions that have a more permanent effect on the site are not permitted, i.e. felling or killing of trees, permanent removal or relocation of logs, digging of soil profile-pits, sampling methods requiring the use of pesticides (e.g. fogging), etc.

#### **Examples of sites in Class 1.1:**

- most 'core-areas' of national parks fit into this Class
- 'scientific reserves' for the study of spontaneous forest dynamics (Naturwaldreservat, Bannwald, Réserve intégrale, integraal bosreservaat, riserva naturale integrale, etc.)

#### **MCPFE 1.2: "Minimum Intervention"**

##### **Guidelines**

- *the main management objective is biodiversity*
- *human intervention is limited to a minimum*
- *activities other than listed below are prevented in the Protected Area:*
  - *ungulate/game control*
  - *control of diseases/insect outbreaks\**
  - *public access*
  - *fire intervention*
  - *non-destructive research, non-detrimental to the management objective*
  - *subsistence resource use \*\**

\* *in case of expected large disease/insect outbreaks control measures using biological methods are allowed provided that no other adequate control possibilities in buffer zone are feasible.*

*\*\* subsistence use to cover the needs of indigenous people and local communities, in so far as it will not adversely affect the objectives of management.*

As in Class 1.1, Class 1.2 also focuses on the conservation of natural dynamics. However, contrary to Class 1.1, intervention is allowed and the main objective is the safeguarding of natural processes but not necessarily to their full extent.

This Class is indeed relevant to many of the small PFAs in Europe; they are very much influenced by developments outside the site, and may require continual intervention in order to mitigate negative influences from outside the reserve, that may cause unnatural imbalances within the PFA.

### Issues requiring clarification

#### **Basic principle of interventions in Class 1.2:**

A limited list of allowable interventions is given, but with no guidance about the basic principle behind any of these possible intervention operations. Intervention is allowed and justified to the extent that it is required to mitigate unnatural imbalances or negative external influences. They are therefore limited to the minimum necessary. The intervention operations applied do not disrupt but support natural dynamics, and are therefore by definition, small scale in nature.

#### **Pest control:**

Further clarification is suggested; follow-up activities such as monitoring the populations of individual species are also allowed (e.g. pheromone and tree traps), as well as small scale 'curative' measures (debarking of infested trees *in situ*) excluding the use of pesticides. However, the removal of old/dead trees is not in line with the principle management objective and is therefore should be avoided.

#### **Fire intervention:**

Following clarification is suggested: an active fire control programme is allowed, not only to prevent calamities outside the PFA, but also to protect the vegetation inside a PFA. Active fire control measures allow for the extinction of fires that spread into the reserve. Preventive measures are normally excluded from the PFA, i.e. no active removal of 'fuel', moribund or dead trees. Fire prevention tracks should preferably be located in the buffer zone of the reserve. They are allowed inside the reserve only in exceptional situations, such as extremely rare and fire sensitive sites (especially in the Mediterranean area,

i.e. isolated, natural broadleaf-remnants, i.e. *Juniperus thurifera* forest, etc.).

#### **Ungulate/ game control:**

Additional specific guidance on this topic is suggested: In areas where no natural control of game populations exist (due to the disappearance of large predators, the provision of alternative anthropogenic food sources such as winter feeding of game, etc.), populations of game within Protected Areas may rise to a level that is detrimental to the site or its natural dynamics. In such cases, game control/culling is allowed in order to keep the population in balance with the ecosystem. Game control measures, however, are exclusively focused on maintaining the biodiversity objectives of the site.

#### **Public access:**

Additional specific guidance on this topic is needed as it is open to wide interpretation. The following explanatory note is suggested:

The rules for public access are, in principle, identical to Class 1.1: public access is allowed in so far as it does 'not adversely affect the objectives'. However, in Class 1.2 'minimum intervention' sites, activities 'encouraging' access to the site are sometimes compatible and acceptable:

- guided tours, ecotourism and educational tours, etc.
- guided trails on public footpaths;

In this context, tracks can be maintained and 'safety felling' of dangerous trees adjacent to frequently used tracks may be carried out. Mass events, sports and motorised recreation, are not allowed as they are detrimental or cause too much disturbance to the site.

#### **Subsistence resource use (indigenous people and local communities):**

It is suggested that some examples are included that illustrate regional differentiation in the implementation of permissible activities:

- Reindeer husbandry, subsistence hunting and firewood collection by Saami-people in Northern Scandinavia are allowed in Class 1.2 sites; the impact of these activities is so small that it is considered non-detrimental, and hence, do not significantly adversely affect the primary objectives.
- Shelter hut facilities (with firewood) in remote areas in Alpine and Nordic regions should be allowed in this Class.
- Commercial and non-commercial collections of berries and mushrooms by indigenous and local

communities are permissible in the Northern Scandinavian PFAs within this Class. Due to the inherent very low recreation pressure, these activities are not considered to have a significant adverse effect on the primary objectives.

- Applying the same philosophy, similar activities should be forbidden in densely populated areas:
  - firewood collection by 'local communities' in Central and Southern Europe may well have a negative impact on the natural dynamics of sites.
  - sheep and goat grazing in the Mediterranean and Alpine regions; these are generally detrimental to Protected Areas, and seriously affect the natural dynamics and species composition.
  - large-scale commercial picking of berries and mushrooms in Eastern, Central, Southern and Western Europe.

However, some of these activities may be in line with the management objectives of Class 1.3, and hence permissible in such sites.

***Possibility for the extension of the allowed activities to cyclic elimination of invasive exotic species :***

Cyclical intervention to allow for the removal of exotic species is a common practice in many reserves in Europe that are left to develop freely. This specific situation is not catered for in the Assessment Guidelines. When the current guidelines are followed, they are to be allocated to Class 1.3, although they are much more in line with the principle of Class 1.2. The principle of cyclical intervention for the removal of invasive exotic species is very similar to pest and game control, activities that are allowed in Class 1.2.

Therefore, it is suggested to extend the allowable activities to include 'control of invasive exotic species'. Further clarification is suggested as follows. Where there is a presence of invasive, exotic species, intervention is allowed, where such species are known to cause serious disruption to natural processes if left uncontrolled (i.e. small scale interventions - cyclical control):

- elimination of seedlings of *Prunus serotina*, *Rhododendron ponticum*, *Quercus rubra*, *Robinia pseudo-acacia*, *Acer negundo*, *Pseudotsuga menziesii*, *Ailanthus altissima*, etc.
- control of Muskrat, Grey squirrel, Sika deer, Raccoon, Pine Wilt Nematode, etc.

However, sites where larger scale restoration and transformation operations are performed are not included in Class 1.2. This applies even where intervention is considered a short term, isolated activity required to improve the situation and

subsequently allow the forest to develop unmanaged. An intervention is considered to be 'Large scale restoration' when it clearly and visually interferes with natural dynamics or succession of the ecosystem. While this 'transformation/transition phase' is in progress, the PFA complies with Class 1.3 (active intervention).

Transformation activities (which classifies areas into Class 1.3) include:

- Large scale intervention in order to remove populations of invasive, exotic species present in the area (*Robinia pseudoacacia* or *Prunus serotina* removal campaign, removal of mature rhododendron-bushes, girdling or cutting of exotic tree or shrub species, etc.)
- The conversion of plantations towards natural stands
- Removal of conifer plantations in native broadleaf woodlands)
- Conversion of coppice to high forest
- Conversion of even-aged high forest to a more diverse species, structure and age class regime
- Active restoration of natural vegetation, natural water regimes (subsequent to previous drainage).

Once the transformation or 'primary installation works' are performed, a minimum intervention regime can be imposed with periodic control and small scale intervention. Subsequently, the site may be reclassified into Class 1.2.

**Examples of sites in Class 1.2:**

- National parks in Northern Finland; no forest operations are allowed, but reindeer husbandry and subsistence use by Saami people are allowed; free right to roam
- 'Minimum intervention' forest and nature reserves in the UK, Ireland, Belgium, and The Netherlands; no further forest operations allowed and spontaneous development only. However, small scale interventions to remove invasive exotic species such as *Rhododendron ponticum*, *Prunus serotina*, etc., are undertaken in order to prevent their spread over the entire area and disrupt natural processes and/ or suppress indigenous species regeneration. Also, the control of sika-deer and grey squirrel is allowed in Ireland and the UK
- 'strict reserves' in Central Europe where game control is currently allowed, in order to prevent overstocking by game, thereby disturbing the natural regeneration of palatable species.
- Some National Parks in Spain (like Sierra Nevada National Park) the Spanish classification term is "Parque Nacional", i.e. natural areas, with limited

human exploitation, which are protected due to the beauty of their landscapes, the representativeness of their ecosystems and the uniqueness of their flora. They have ecological, aesthetic, educational and scientific values whose conservation deserves special attention. One of the main management programs in Sierra Nevada deals with the prevention and extinction of forest fires. As a consequence, one of the main objectives of the Ordinance Plan is 'Defending the natural space against forest fires'.

### MCPFE 1.3: "Conservation Through Active Management"

#### Guidelines

- *the main management objective is biodiversity*
- *a management regime with active interventions directed to achieve the specific conservation goal of the Protected Area is taking place*
- *any resource extraction, harvesting, silvicultural measures detrimental to the management objective as well as other activities negatively affecting the conservation goal are prevented in the Protected Area*

There is a lot of confusion surrounding the inclusion of protected forests where even limited commercial extraction of timber (or other financial revenue from hay, meat, etc.) occurs. The guidelines on management regime may lead to a wide spectrum of interpretation ranging from 'pure conservation management' to 'good multifunctional forest practice with special attention to biodiversity'. On the other hand, management in Class 1.3 sites may involve similar techniques as in multifunctional forests.

#### Issues requiring clarification

It is suggested that additional specific guidance on this topic be provided in an explanatory note: The key element is that all sites in Class 1.3 should comply with the primary management objective of 'biodiversity' and especially to the *general principles*:

- Existence of a legal basis
- Long term commitment (minimum 20 years)
- Explicit legal designation for the protection of biodiversity

The primary objective (conservation of biodiversity) should be clearly stated via the conservation status of the site, which should have a legal basis, with a long term commitment linked to an explicit designation. Therefore, only 'officially designated Protected Areas'

may be included (i.e. with defined borders - or where a specific forest association occurs which has no fixed geographic boundaries).

Active management is consequently performed solely as a function of this objective. Management may produce marketable goods as by-products, which may result in commercially viable or loss-making activities. However, the production of marketable goods should never be the primary goal, but rather a subsidiary or secondary objective as a result of management to achieve the primary 'biodiversity' objective.

Active management will primarily be focused on two key aspects:

- **restoration management:**

Many Protected Areas have been drastically altered by man over past centuries and may need a long term restoration programme to be restored. This may include transformation of plantations to natural forest stands, restoration of natural groundwater regimes, removal of stands comprised of invasive exotic species (e.g. *Rhododendron*, *Prunus serotina*, *Robinia*) etc. This restoration programme normally has a limited timeframe (i.e. 10-20 years). Thereafter, non-intervention management, minimum-intervention or continual active intervention for biotope or species conservation are all possible.

- **active management for specific biotopes or species conservation:**

In many Protected Areas, active management is performed in order to conserve or restore specific biotopes and associated species. Management often consists of ancient management regimes that are no longer commercially viable and are therefore dying out. Consequently, the cessation of management endangers species associated with these ancient management regimes.

#### Examples of activities that fulfil the requirements of ancient management regimes:

- Prescribed burning and 'slash and burn' as a specific measure for the protection of threatened species, as performed in Koli National Park (FIN)
- Coppice and coppice with standards management performed or reinstated for the conservation of rare butterflies and vegetation, in nature reserves in the UK, Belgium, Germany, etc.
- Transformation of neglected even-aged semi natural woodlands (previously coppice-with-standards) to optimise species and structural diversity (IRL)

- Cutting and mowing of forest tracks and glades for the conservation of rare light-demanding species in nature reserves in the UK, Belgium, Netherlands, etc
- mowing of mixed larch-spruce forests to create specific open agro-forestry systems of “Lärch-Wiesen” in alpine regions for conservation of light demanding species (Austria, Germany, Italy and Switzerland)
- Removal and control of invasive exotic species e.g. *Rhododendron* sps. in Ireland
- Forest grazing (wood pasture) created or maintained in order to keep a specific open woodland mosaic and the diversity (i.e. fungi, plants, birds, etc.) associated with it, as performed in nature reserves in the Netherlands and Belgium, the New Forest National park (UK), the Borkener Paradis nature reserve (Germany), etc.

#### Examples of sites that should not be included in Class 1.3:

- Coppice and coppice with standards management systems in multifunctional forests where a specified conservation status does not exist.
- Species protection programmes in the context of regular forest management (outside specified conservation sites); the conservation of rare and vulnerable biotopes or specific species is considered an important aspect of sustainable multifunctional forest practice. It has a very important contribution to the overall conservation of species and habitats, but should not be included in the reporting of PFAs.
- Transformation of man-made forests to natural forest stands as part of a management objective in local, regional or national forest strategies (i.e. aimed at more stable or more ‘attractive’ forests) or in the context of a local management plan.
- Forest grazing as a commercial activity, even when in harmony with forest and conservation goals, but outside explicitly designated Protected Areas (e.g. Pig and Cattle grazing in Dehesa-landscapes outside Protected Areas in Spain and Portugal).

Natura 2000 sites do not automatically fulfil the requirements of Class 1.3. If Natura 2000 sites comply with the General Principles stated in Annex 2 of MCPFE Resolution 4, the affiliation to Classes 1.1, 1.2, 1.3 or 2 of each individual site should be examined on a case by case basis.

#### MCPFE Class 2:

#### Main Management Objective: “Protection of Landscape and Specific Natural Elements”

##### Guidelines

- *interventions are clearly directed to achieve the management goals landscape diversity, cultural, aesthetic, spiritual and historical values, recreation, specific natural elements*
- *the use of forest resources is restricted*
- *a clear long-term commitment and an explicit designation as specific protection regime, defining a limited area is existing*
- *activities negatively affecting characteristics of landscapes or/and specific natural elements mentioned are prevented in the Protected Area*

This Class is less strictly defined as previous Classes, and appears to cover a wider range of forest management regimes. This Class was almost certainly envisaged, bearing in mind the type of conservation applied in ‘regional parks’, ‘natural parks’ etc: i.e. sites of important scenic beauty that have received an official status of protection. Management objectives are a delicate balance between commercial activities (agriculture, forestry) and conservation of landscape with specific elements of historic and natural value. It often involves incentives for conservation and restoration and for the promotion of compatible types of recreation.

Countries may however be tempted to interpret it as broadly as possible to include all semi-natural woods outside officially designated ‘conservation areas’ (class 1). Moreover, the specific aspects of ‘landscape protection’ are not always clearly defined; all forests have, to a certain extent, an important function in ‘shaping’ and conserving the landscape. The simple conservation of forest against deforestation could in this sense be considered as an important protective measure toward landscape conservation.

As shown in the figure 1 and 2 in chapter 3.3, this appears to be the Class that causes the most confusion: differences in interpretation may lead to the inclusion or exclusion of vast proportions of the forest area.

#### Issues requiring clarification

*Additional technical guidelines* are suggested which emphasise that only sites that comply with the general principles should be included, i.e. forests within the boundaries of specifically designated

protected landscapes, and designated in law. Consequently, the site should be managed for landscape protection/conservation. All other functions are subordinate to the conservation and development of the aesthetic, socio-cultural or historical values of the landscape, of which the forest is an integral and essential component.

Commercial forestry is still possible in some of these sites, as long as it complies with the primary objective of landscape protection. Regulations within protected landscapes may therefore include important restrictions on forest management (e.g. construction of forest roads, tree species composition, harvesting methods, use of clearfelling, etc.), or even forbid the continuation of specified commercial forestry activities. In most cases however, the continuation of regular multifunctional forestry operations is possible in protected landscapes, as long as it does not contravene the landscape conservation goals. It remains unclear how the guideline 'the use of forest resources is restricted' is to be interpreted. Is it an absolute requirement that management restrictions are imposed and if so, how important should these restrictions be.

The addition 'and specific natural elements' also requires further elaboration. It is very unclear what is meant. Because of the similarity of terminology, it could be assumed that this coincides with the definition of an IUCN Protected Area Management Category III: 'natural monument': *features of outstanding significance (appropriate natural features include spectacular waterfalls, caves, craters, fossil beds, sand dunes and marine features, along with unique or representative fauna and flora; associated cultural features might include cave dwellings, cliff-top forts, archaeological sites, or natural sites which have heritage significance to indigenous peoples.* However, other interpretations are also possible. In its current formulation, it has already been interpreted as 'key biotopes in commercial or certified forests' or 'habitats of the Habitat directive' and even 'all natural and semi-natural forests that receive a close-to-nature or traditional management'. All of these are or can be regulated in a legally binding long term commitment.

In particular, the situation vis avis Natura 2000 sites must be clarified in this context: habitats (that comply with the Habitats Directive) may indeed be considered as 'specific natural elements' and there are long term legally binding commitments for all sites that are officially designated as 'Special Area of Conservation' with fixed geographical boundaries.

#### Examples of sites that fulfil the requirements:

- forest within most European 'National Parks' (that comply with IUCN Category V, and not with Category II), Regional parks, Regional natural parks, Natural parks,
- forests within official 'protected landscapes' or 'protected natural monuments'

#### MCPFE 3 Class 3:

##### Main management objective 'protective functions'

##### Guidelines

- *management is clearly directed to protect soil and its properties or water quality and quantity or other forest ecosystem functions, or to protect infrastructure and managed natural resources against natural hazards*
- *Forests and other wooded lands are explicitly designated to fulfil protective functions in management plans or other legally authorised equivalents*
- *any operation negatively affecting soil or water or the ability to protect other ecosystem functions, or the ability to protect infrastructure and managed natural resources against natural hazards is prevented*

Protective forests are essentially beyond the scope of this aspects of classification. They are not covered in the IUCN Protected Area Management Categories and are not PFAs as such. In the MCPFE State of Europe's Forests (MCPFE, 2003b) they are also reported separately.

In the annex to the Vienna Declaration however, they are incorporated in the 'Assessment Guidelines for Protected and Protective Forests in Europe' (MCPFE, 2003a). Hence, the issue of protective forests in the context of MCPFE assessment were covered in the work of COST Action E27.

##### Issues requiring clarification

The wording 'with respect to management plans' is rather confusing and almost certainly contradicts the general principles, where an explicit designation is required. Management plans *are considered* to be technical executive supporting documents and are not considered to be sufficient on their own, especially as they may not provide guarantees toward a long-term commitment.

Only forests that are specifically designated as 'protective forests' for the protection of soil cover, and forests in watershed protection areas, should be

included. These areas have all been explicitly designated and involve long-term commitments.

Officially designated protective forests always require an extra, specific explicit designation. Reference can be made in a management plan, but is given additional status via this explicit designation, which is the only way it can be officially recognised as 'protective forest'.

#### Examples of sites that fulfil the requirements:

- Forests within the borders of official 'protective forests', explicitly designated by means of a Ministerial Act, law or decree. Specific restrictions on tree felling or clearfell size may also be imposed.
- Forests within the borders of state-endorsed watershed areas; specific restrictions on tree species composition or the use of herbicides may be imposed.

#### Examples of sites that do not fulfil the requirements:

Protective zones identified in the context of a management plan; these have not been endorsed at a higher (i.e. national or International) level and are therefore not considered to be explicit enough.

Forests managed under specific management regimes, imposed through forest administration directives, e.g. where forests border streams (i.e. buffer zones - no plantation of conifers allowed within defined areas adjacent streams; no clearfelling allowed, etc.): these designations are not explicit enough, rather they are considered as regulations for 'good forest practice'.

#### References

- ANON., 1992: Convention on Biological diversity. Adopted at the United Nations 1992 Earth Summit in Rio de Janeiro. <http://www.biodiv.org/convention/convention.shtml>
- DUDLEY, N. & STOLTON, S., 2003: Biological diversity, tree species composition and environmental protection in regional FRA-2000. Geneva Timber and Forest Discussion paper 33. UN-ECE and FAO, Rome.
- DUDLEY, N. & PHILLIPS, A., 2006: Forests and Protected Areas: Guidance on the use of the IUCN Protected Area management Categories. WCPA Best Practice Protected Area Guidelines Series No. 12 - IUCN, Gland, Switzerland and Cambridge, UK. 58pp.
- EUROPARC & IUCN, 2000: Guidelines for Protected Area Management Categories Interpretation and Application of the IUCN Management Categories for Protected Areas in Europe, second corrected version.
- FAO, 1998: FRA 2000 Terms and Definitions, Forest Resource Assessment Programme Working Paper number 1, Rome.
- FAO, 2001: Global Forest Resources Assessment – Main Report. FAO Forestry Paper 140, FAO Forestry department – Rome; [www.fao.org/forestry/site/7949/en](http://www.fao.org/forestry/site/7949/en)
- FAO, 2006: Global Forest Resources Assessment 2005. Progress towards sustainable forest management. FAO Forestry Paper 147, 320 pp. FAO – Rome.
- FRANK, G., LATHAM, J., LITTLE, D., PARVIAINEN, J., SCHUCK, A., VANDEKERKHOVE, K., 2005: Analysis of Protected Forest Areas in Europe - Provisional Results of COST Action E27 PROFOR. In: Commarmot, B.; Hamor, F. D. (eds): Natural Forests in the Temperate Zone of Europe. Values and Utilisation. Conference 13-17 October 2003, Mukachevo, Ukraine. Proceedings. Birmensdorf, Swiss Federal Research Institute WSL; Rakhiv, Carpathian Biosphere Reserve. 377-386.
- FRANK, G. & PARVIAINEN, J., 2006: MCPFE Information Document on Data Collection and Compiling the Statistics on Protected and Protective Forest and Other Wooded Land in Europe. Warsaw. Ministerial Conference on the Protection of Forests in Europe, Liaison Unit Warsaw.
- IUCN, 1994: Guidelines for Protected Area Management Categories. Gland, Switzerland, Commission on National Parks and Protected Areas (CNPPA), World Conservation Union (IUCN) and Cambridge, UK, UNEP World Conservation Monitoring Centre (WCMC). IUCN, Gland, Switzerland and Cambridge, UK. 261pp.
- LATHAM, J., FRANK, G., FAHY, O., KIRBY, K., MILLER, H. & STIVEN, R. (eds), 2005: Cost Action E27 Protected Forest Areas in Europe – Analysis and Harmonisation (PROFOR): reports of signatory States. BFW – Vienna.
- MCPFE, 2003a: Annex 2 to Vienna resolution 4 - MCPFE-Assessment guidelines for protected and protective forest and other wooded land in Europe. IN : Fourth Ministerial Conference on the Protection of Forests in Europe – Conference Proceedings, 28-30 April 2003, Vienna, Austria.
- MCPFE, 2003b: State of Europe's Forests 2003. The MCPFE Report on Sustainable Forest Management in Europe. Jointly prepared by the MCPFE Liaison Unit Vienna and UN-ECE/FAO.
- PARVIAINEN, J., KASSIOUMIS, K., BÜCKING, W., HOCHBICHLER, E., PÄIVINEN, R., LITTLE, D., 2000: COST Action E4: Forest Reserves Research Network. Missions, Goals, Linkages, Recommendations and Partners. Final Report. Joensuu, Finland. In: European Commission (ed.): COST Action E 4. Forest Reserves Research Network. 377 pp. Luxembourg. ISBN 92-894-0155-9.
- PARVIAINEN, J., FRANK, G., 2003: Protected forests in Europe. approaches harmonising the definitions for international comparison and forest policy making. *Journal of Environmental Management* 67 (2003): 27-36.

- PARVIAINEN J., BÜCKING W., VANDEKERKHOVE K., PÄIVINEN R. & SCHUCK A., 2000: Strict Forest Reserves in Europe: efforts to enhance biodiversity and research on forests left for free development in Europe (EU-COST-action E4) Forestry 73/1, 107-118.
- VANDEKERKHOVE K. (ed), 2004: COST Action E27 Protected Forest Areas in Europe - Comments by the members of COST-action E27 – Working Group 2 on the draft paper 'Forest Protected Areas and the IUCN Protected Area Management Categories - Additional guidance on the use of IUCN Protected Area Categories for Forest Protected Areas.'
- VANDEKERKHOVE K., FRANK G. & LITTLE D., 2005: COST Action E27 Protected Forest Areas in Europe - Working Group 2: 'Harmonisation and improvement of information on European Protected Forest Areas – international dimension.' Technical paper.
- Reported data and assessment guidelines in the framework of the MCPFE reporting procedure on Protected Forest Areas: results and recommendations of COST-action E27, WG2.
- UN-ECE/FAO, 2000: Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (industrialized temperate/boreal countries). Main Report. UN-ECE/FAO Contribution to the Global Forest Resources Assessment 2000. Geneva Timber and Forest study Papers, No. 17. 445 pp. New York and Geneva.
- UN-ECE/FAO, 2005: Joint FAO/ECE Working Party on Forest Economics and Statistics. Document 27th session March 22-24 2005. Guidance of work area 2: Forest Resources Assessment and Indicators of Sustainable Forest Management in the Region. Geneva. 11 pp.
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