Forest Stewardship Council®

The FSC National Forest Stewardship Standard of Bulgaria

FSC-STD-BGR-01-2016 Bulgarian Natural and Plantations Forest and Small and Low-intensity Managed Forests (SLIMF).

2016

Title	The FSC National Forest Stewardship Standard of Bulgaria
Document reference code:	FSC-STD-BGR-01-2016 Bulgarian Natural and Plantations Forest and Small and Low-intensity Managed Forests (SLIMF).
Status:	Approved Draft
Geographical Scope:	National
Forest Scope	National, Plantation and SLIMF
Approval body	Policy and Standards Committee
Submission date	June 2016
Approval date	October 2016
Effective date	16 August 2017
Validity Period	5 years starting from the date of publication
Country Contact:	Neli Doncheva, ndoncheva@wwfdcp.bg, fcic@wwfdcp.bg
FSC Policy and Standards Unit Contact	FSC International Center - Policy and Standards Unit - Charles-de-Gaulle-Str. 5 53113 Bonn, Germany +49-(0)228-36766-0 +49-(0)228-36766-30 policy.standards@fsc.org. Or Gordian Fanso g.fanso@fsc.org

The Forest Stewardship Council® (FSC) is an independent, not for profit, non-government organization established to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests.
FSC's vision is that the world's forests meet the social, ecological, and economic rights and needs of the present generation without compromising those of future generations.

Table of content

1. Preface

1.1. Descriptive statement of the Forest Stewardship Council (FSC)

The Forest Stewardship Council A.C. (FSC) was established in 1993, as a follow-up to the United Nations Conference on Environment and Development (the Earth Summit at Rio de Janeiro, 1992) with the mission to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

Environmentally appropriate forest management ensures that the production of timber, non-timber products and ecosystem services maintains the forest's biodiversity, productivity, and ecological processes. Socially beneficial forest management helps both local people and society at large to enjoy long term benefits and also provides strong incentives to local people to sustain the forest resources and adhere to long-term management plans. Economically viable forest management means that forest operations are structured and managed so as to be sufficiently profitable, without generating financial profit at the expense of the forest resource, the ecosystem, or affected communities. The tension between the need to generate adequate financial returns and the principles of responsible forest operations can be reduced through efforts to market the full range of forest products and services for their best value (FSC A.C. By-Laws, ratified, September 1994; last revision in June 2011).

FSC is an international organization that provides a system for voluntary accreditation and independent third-party certification. This system allows certificate holders to market their products and services as the result of environmentally appropriate, socially beneficial and economically viable forest management. FSC also sets standards for the development and approval of FSC Stewardship Standards which are based on the FSC Principles and Criteria. In addition, FSC sets standards for the accreditation of Conformity Assessment Bodies (also known as Certification Bodies) that certify compliance with FSC's standards. Based on these standards, FSC provides a system for certification for organizations seeking to market their products as FSC certified.

1.2. Descriptive statement of the National Office / Standard Development Group

The Bulgarian National Standard Development Group (NSDG) is an independent chamber balanced group, composed of members of the environmental, economic and social chambers. The NSDG's objective is to develop and maintain the FSC National Forest Stewardship Standard according to FSC International's standards and procedures. The NSDG is chaired by Ms. Neli Doncheva (Forest Programme Manager of WWF Bulgaria ndoncheva@wwfdcp.bg) and coordinated by Ms. Neli Arabadzhieva (Forest Programme Assistant at WWF Bulgaria fcic@wwfdcp.bg).

The NSDG consists of the following members:

Environmental		
Ms. Veronika Ferdinandova	Bulgarian society for the protection of birds (BSPB/BirdLife Bulgaria)	veronika.ferdinandova@bspb.org
Mr. Dimitar Popov	Green Balkans NGO	dpopov@greenbalkans.org
Mr. Toma Belev	Association of Parks in Bulgaria	toma_belev@abv.bg
Economic		
Mr. Kiril Tashev	Executive Forest Agency (EFA)	tashev.k@gmail.com
Mr. Evtim Mutafov	Branch Chamber of Woodworking and Furniture Industry (BCWFI)	dospatles@abv.bg
Mrs. Elena Velichkova	Ministry of Agriculture and foods	evelichkova@mzh.government.bg
Social		
Mr. Alexander Borisov	Executive Agency “General Labour Inspectorate”	aborisov@gli.government.bg
Ms. Eleonora Yosifova	Bulgarian association for alternative tourism (BAAT)	yosifova@baatbg.org
Mr. Ivan Paligorov	Union of Bulgarian Foresters (UBF)	ipaligorov@abv.bg

2. Preamble

2.1. Purpose of the standard

This standard sets out the required elements against which FSC accredited Certification Bodies shall evaluate forest management practices within the scope (see 2.2.below) of the standard.

The FSC Principles and Criteria (P&C) for Forest Stewardship provides an internationally recognized standard for responsible forest management. However, any international standard for forest management needs to be adapted at the regional or national level in order to reflect the diverse legal, social and geographical conditions of forests in different parts of the world. The FSC P&C therefore requires the addition of indicators that are adapted to regional or national conditions in order to be implemented at the Forest Management Unit (FMU) level.

With the approval of FSC-STD-60-004 V1-0 EN the FSC International Generic Indicators (IGI) by the FSC Board of Directors in March 2015, the adaptation of the P&C to regional or national conditions is done using the IGI standard as the starting point. This has the advantage to:

- Ensure the consistent implementation of the P&C across the globe;
- Improve and strengthen the credibility of the FSC System;
- Improve the consistency and quality of National Forest Stewardship Standards;
- Support a faster and more efficient approval process of National Forest Stewardship Standards. The FSC Principles and Criteria together with a set of national indicators approved by FSC Policy and Standards Committee (PSC) constitute an FSC National Forest Stewardship Standard (NFSS).

The development of NFSS follows the requirements set out in the following FSC normative documents:

- FSC-PRO-60-006 V2-0 EN Development and Transfer of National Forest Stewardship Standards to the FSC Principles and Criteria Version 5-2;
- FSC-STD-60-002 (V1-0) EN Structure and Content of National Forest Stewardship Standards AND
- FSC-STD-60-006 (V1-2) EN Process requirements for the development and maintenance of National Forest Stewardship Standards.

The above documents have been developed by the FSC Policy and Standards Unit (PSU) to improve consistency and transparency in certification decisions between different Certification Bodies in different parts of the world, and thereby to enhance the credibility of the FSC certification scheme as a whole.

2.2. Scope of standard

This standard is applicable to all forest operations seeking FSC certification within Bulgaria. The standard applies to all forest types, including Small and Low Intensity Managed Forests (SLIMF) operations.

2.3. Background information on the standard development:

The drafting of the national FSC standard for Bulgaria was initiated and supported by WWF Bulgaria. The process was carried out by National Standard Development Group (NSDG) which was officially registered in the FSC Policy and Standards Unit in August 2014. According to the FSC procedure, the NSDG was established by equal number of experts in the three main and compulsory sectors. The coordination of the process was implemented by WWF Bulgaria.

The first draft was developed within the period August - November 2014 and was presented for public consultation. The second draft included the results from the public consultations, as well as the last changes in the FSC International Generic Indicators. The second draft of the standard was tested on the field. A total of 3 field tests were made: one in FSC Certified Forest (State Forestry Unit Trigrad), one in non-certified FMU (State Hunting Unit Trakia) and one in SLIMF forest (public forest of the the Municipality of Gorna Oriahovitsa). After the field tests and analysis of the results, the third draft of the standard was set out again for public consultation. The second public consultation was held in the period March – May 2016. The last fourth draft of the standard was developed in the period May-June 2016 as in it were integrated the relevant comments from the second public consultation. The last version of the standard was sent to FSC Policy and Standards Unit (PSU) on 15 June 2016. PSU assessed the Bulgarian National Forestry Stewardship Standard (NFSS) and came to the conclusion that the standard is not in breach of any FSC international procedure, standards or related normative document for NFSS development and maintenance. FSC Policy and Standards Unit (PSU) suggested the standard for approval to the FSC Policy and Standards Committee (PSC). PSC approved the Bulgarian NFSS on its meeting in October 2016 with some minor conditions which were met in a timely manner.

Further information can be obtained from the coordinator of the NSDG Ms. Neli Arabadzhieva (Forest Programme Assistant at WWF Bulgaria fcic@wwfdcp.bg) and the chairperson of the NSDG Ms. Neli Doncheva (Forest Programme Manager of WWF Bulgaria ndoncheva@wwfdcp.bg).

3. Version of the standard

FSC-STD-BGR-01-2016 Bulgarian Natural and Plantations Forest and Small and Low-intensity Managed Forests (SLIMF), is the first NFSS for Bulgaria. The standard was developed in the period August 2014 – October 2016 based on consensus of the Bulgarian NSDG members.

PSC approved the Bulgarian NFSS on its meeting in October 2016 with some minor conditions which were met in a timely manner.

4. Context

4.1. General description of the geographical area covered by the standard

The standard applies for the whole territory of the Republic of Bulgaria.

4.2. Members of the committee that prepared the standard

This standard was developed by the National Standard Development Group (NSDG) of Bulgaria. The NSDG was chaired by Ms. Neli Doncheva (Forest Programme Manager of WWF Bulgaria, ndoncheva@wwfdcp.bg) and coordinated by Ms. Neli Arabadzhieva (Forest Programme Assistant at WWF Bulgaria fcic@wwfdcp.bg). The participants of the working group were representatives of the following institutions and organizations: Executive Forest Agency (represented by Mr. Kiril Tashev), Ministry of Agriculture and Food of the Republic of Bulgaria (Mrs. Elena Velichkova), Bulgarian Branch Chamber of Woodworking and Furniture Industry (Mr. Evtim Mutafov and his official deputy for the NSDG Mr. Dimitar Dzhokov), Executive Agency “General Labour Inspectorate” (Mr. Alexander Borisov), Union of Bulgarian Foresters (Mr. Ivan Paligorov and his official deputy for the NSDG Mrs. Anna Petrakieva), Bulgarian Association for Alternative Tourism (Ms. Eleonora Yosifova), Association of Parks in Bulgaria (Mr. Toma Belev and his official Deputy for the NSDG Ms. Zornitsa Stratieva), Green Balkans NGO (Mr. Dimitar Popov and his official deputy for the NSDG Mr. Doncho Kirov) and the Bulgarian Society for the Protection of Birds (Ms. Veronika Ferdinandova with her official deputy for the NSDG Mr. Dimitar Plachiyski).

4.3. Key consultants and advisors who assisted the committee

The standard development process was closely supported by the following experts in responsible forest management who gave valuable contributions and advice to the NSDG throughout the standard document: Ms. Dobromira Dimova Petrova, Mr. Stanislav Lazarov and Mr. Alexander Bardarov. Valuable support for the development of the standard gave also: Mr. Pencho Dermendzhiev and Ms. Zoya Markova as responsible forest management experts with their opinions and expertize especially during the field tests of the standard.

4.4. Acknowledgement

WWF Bulgaria would like to thank to both the NSDG and supporting experts for their professional attitude and knowledge, patience and great understanding to the principle of consensual decision making during the standard development process. WWF Bulgaria would like to thank also to all interested stakeholders who gave their valuable opinions during the public consultations. Great support to the process was given also by the teams of the forest units that hosted the field tests of the standard and particularly the management and employees of State Forestry Unit Trigrad, State Hunting Unit Trakia, the Municipality of Gorna Oriahovitsa and Mr. Radoslav Slavov - licensed sylviculturist responsible for the municipal forests.

5. References

The following referenced documents are relevant for the application of this standard. For references without a version number, the latest edition of the referenced document (including any amendments) applies.

FSC-POL-01-004	Policy for the Association of Organizations with FSC
FSC-POL-20-003	The Excision of Areas from the Scope of Certification
FSC-POL-30-001	FSC Pesticides Policy
FSC-POL-30-401	FSC Certification and the ILO Conventions
FSC-POL-30-602	FSC Interpretation on GMOs (Genetically Modified Organisms)
FSC-STD-01-002	Glossary of Terms
FSC-STD-01-003	SLIMF Eligibility Criteria
FSC-STD-20-007	Forest Management Evaluations
FSC-STD-30-005	FSC Standard for Group Entities in Forest Management Groups
FSC-STD-60-002	Structure and Content of National Forest Stewardship Standards
FSC-STD-60-006	Development of National Forest Stewardship Standards
FSC-PRO-01-001	The Development and Revision of FSC Normative Documents
FSC-PRO-01-005	Processing Appeals
FSC-PRO-01-008	Processing Complaints in the FSC Certification Scheme
FSC-PRO-01-009	Processing Policy for Association Complaints in the FSC Certification Scheme
FSC-DIR-20-007	FSC Directive on Forest Management Evaluations

6. Note on the interpretation of indicators:

All indicators in this standards are mandatory for large operations. Operations that fall under the SLIMF category (See below for definition of SLIMF), are expected to comply with indicators denoted by the asterisk sign * (e.g. Indicator 1.1.1.*). These indicators are in some cases accompanied by notes that are specific to small operations - Note for SLIMF.

7. Scale Intensity and Risk (SIR):

SIR indicators are considered at least to following IGIs: 1.7.1; 1.7.5; 2.3.4; 2.3.5; 4.3.1; 4.4.1; 4.4.2; 4.5.1; 5.1.1; 5.1.2; 5.1.3; 5.4.2; 5.5.1; 5.5.2; 6.1.1; 6.1.2; 6.2.1; 6.4.1; 6.4.3; 6.4.4; 6.5.1; 6.5.4; 6.5.5; 7.1.1; 7.1.2; 7.2.1; 7.2.2; 7.6.1; 7.6.3; 7.6.4; 8.2.1; 8.2.2; 8.5.1; 9.1.1; 9.1.2; 9.3.1; 9.3.2; 9.3.3; 9.4.1; 9.4.2; 10.9.1; 10.9.2; 10.9.3 and 10.9.4 (FSC-STD-60-004)

8. Other important notes on the standard interpretation:

8.1. Status of the Verifiers:

The verifiers in this standard are not obligatory and only serve as a guidance for the auditors.

8.2. Status of the Notes:

All notes in the standard are obligatory.

8.3. Status of the Annexes:

Annexes 1, 4 and 12 of this standard are developed serve as guidance for both auditors and Organizations. Annexes 2, 3, 5, 6, 7, 8, 9, 10, 11 and 13 are obligatory for the correct implementation of the relevant indicators. Over the life time of the standard some annexes might change. Certificate holders and Certification Bodies are expected to refer the Bulgarian WWF website for updated version of these annexes. http://www.wwf.bg/

8.4. High Conservation Values (HCV):

Annex 13 of the standard, which is the HCV Toolkit for Bulgaria is an obligatory document in relation to the requirements of Principle 9 of this standard. This document is also known as Practical Guide for Identifying, Managing, and Monitoring High Conservation Value Forests in Bulgaria. It was developed in 2004 by Bulgarian experts with the active assistance of ProForest. As basis for the toolkit is used the concept of forests with high conservation value (HCVF), which was established by FSC and integrated into the FSC standard for forest management to determine the key environmental and social values of forests and ensure their preservation or improvement through the application of rational management decisions and measures. The toolkit was updated during the process of development of the NFSS in the period 2014-2016.

8.5. SLIMF definition:

For Bulgaria SLIMF FMUs are those that comply with at least one of the following requirements:

- FMUs with an area maximum 1000 ha;
- The rate of harvesting is less than 20% of the mean annual increment (MAI) within the total production forest area of the unit and the annual harvest from the total production forest area is less than 5000 cubic meters;
- The rate of harvesting is less than 20% of the mean annual increment (MAI) within the total production forest area of the unit and the average annual harvest from the total production forest is less than 5000 m3 / year during the period of validity of the certificate.

9. Principles, Criteria and National Indicators

PRINCIPLE 1: COMPLIANCE WITH LAWS The *Organization** shall comply with all applicable laws, regulations and nationally-ratified international treaties, conventions and agreements. (P1 P&C V4)
Criterion 1.1. The *Organization** shall be a legally defined entity with clear, documented and unchallenged legal registration, with written authorization from the legally competent authority for specific activities. (new)
Indicator 1.1.1.* The *Organization** has legal and unchallenged registration entitling it to carry out all activities within the scope of the certificate. Verifiers:
<u>For legal entities:</u> - check of the current status in the trade register as per the Unique Identification Code (UIC); - tax registration; - management contracts; - registration in the public registers attesting the right to perform the activities in the scope of the certificate - documents proving the right of long-term management / use (deeds , documents proving the adoption of the Forest Management Plan , sketches from the cadastre)
<u>For individuals/ physical person:</u> - ID; - proof of ownership : deeds, decision for restitution of ownership issued by Land Commission / Municipal Agriculture Office, including sketch (delineation)
Criterion 1.2. The *Organization** shall demonstrate that the *legal status** of the *Management Unit*,* including tenure and use rights, and its boundaries, are clearly defined. (C2.1 P&C V4)
Indicator 1.2.1. * There are *legal** documents proving *tenure** rights, including the right to use the resources within the scope of the certificate, issued by a competent authority and in accordance with *legal** procedures. Verifiers:
<u>Documentary check:</u> - deeds and / or sketches/ maps, contracts and / or orders for usage; - documents proving the right for long-term management / use - legal provisions, if applicable.
Indicator 1.2.2.* The boundaries of all *Management Units** within the scope of the certificate are documented, clearly identifiable in the field (marked and following natural or administrative boundaries) and are clearly shown on maps Verifiers:

Documentary check: - documents issued by the Cadaster Agency, maps of restituted ownership (MRW), documents with description of the boundaries ; paper and electronic maps. - complaints regarding the *tenure** and land *use rights**. *Field check to assure that*: - boundaries are marked on the field - there is a compliance with the documentary information.
Criterion 1.3. The *Organization** shall have *legal** rights to operate in the *Management Unit*,* which fit the *legal status** of The *Organization** and of the *Management Unit*,* and shall comply with the associated *legal** obligations in applicable *national* and *local laws** and regulations and administrative requirements. The *legal** rights shall provide for harvest of products and/or supply of ecosystem services from within the *Management Unit*.* The *Organization** shall pay the legally prescribed charges associated with such rights and obligations. (C1.1, 1.2, 1.3 P&C V4)
Indicator 1.3.1* All activities, including the harvest of products and / or supply of *ecosystem services**, are implemented in accordance with national legislation and in compliance with the rights of ownership and use. (see Annex1 - List of applicable legislation) Verifiers
Documentary check: - availability and accessibility of up-to-date database containing specialized forest, environmental and labour related regulatory framework; - document proofs for violations registered by competent authorities; - protocols from inspections of competent authorities; *Field check:* - overall assessment of compliance with regulatory framework ; - check of compliance with the requirements for the welfare of animals used in the transportation of wood *Interviews with:* - the staff of the Organization; - *workers** of subcontractors; - Owners of animals used for some operations in the forests (e.g. extraction of logs, etc.) Responsible institutions and other stakeholders (incl. regarding the welfare and compliance with animal health requirements for animals used in forestry, such as horses, mules , donkeys , oxen , etc.).
Indicator 1.3.2.* *Planning documentation** for activities does not contradict national legislation. (see Annex 1 - List of applicable legislation*)* Verifiers:

Documentary check:

- past and current legal proceedings for non-compliance with the legislation;
- Punitive administrative acts etc.
- Written protocols for contradictions identified.
- Planning documents.

Interviews with:

- relevant institutions and stakeholders;
- employees and subcontractors of the Organization;
- Relevant institutions and other stakeholders.

Indicator 1.3.3.* There is evidence that the financial liabilities (applicable legally prescribed charges) related to forest management are paid in a *timely manner**.

Note for *SLIMF:** This requirement is obligatory for *SLIMF** *Organizations** which have a management structure and obligations to maintain financial accounting according to *national law**.

Verifiers:

Documentary check:

- Receipts, accounts, etc.

Interviews with:

- Subcontractors, suppliers and other stakeholders.

Criterion 1.4. The *Organization** shall develop and implement measures, and/or shall engage with regulatory agencies, to systematically protect the *Management Unit** from unauthorized or illegal resource use, settlement and other illegal activities. (C1.5 P&C V4)

Indicator 1.4.1.* A clear and effective system for prevention and control of illegal logging, poaching, collecting NTFP*, settlement and other unauthorized activities is available and is implemented. The system includes but is not limited to the following:

- Technical and human resources to exercise prevention and control in the field;
- Levels of risk defined for the different parts of FMU and activities for control and prevention are in conformity with the defined risk;
- Differentiation of forest roads with controlled access to areas with high risk;
- Control of traffic on forest roads.

Note for SLIMF*: Only the second bullet point is obligatory for SLIMF* Organizations*.

Verifiers:

- documents certifying that the periodic and / or sudden control is being exercised.
- orders or other documents for establishment of forest roads with controlled access to areas being of high risk;
- orders for closure of temporary forest roads;
- documents to determine the level of risk for individual territories / parts of *FMU*;*
- protocols and other documents from inspections carried out by the competent authorities and personnel of the *Organization**
- documents as evidence that the *Organization** has undertaken the necessary measures for the

cases in which violations were found – signals to the prosecutor's office and regional forest directorates, written statements for observed administrative violations, orders for search of violators, etc.;

- check on how many written statements for violations have actually been executed (got enforced) in order to check the effectiveness of the control implemented by the *Organization*;*

Field check

- check of the human resources and technical means engaged in the control on the field.

Interviews with:

- with the responsible personnel of the *Organization**;
- with *interested stakeholders**.

Indicator 1.4.2. Where other competent authorities have responsibilities in terms of *protection** and control of unauthorized activities, a system to engage and work with them is implemented.

Verifiers

Documentary check:

- contracts for implementation of safeguard and control;
- correspondence with competent authorities.

Interviews with:

- relevant responsible employees of the *Organization**;
- representatives of competent authorities (Executive Forest Agency and its subdivisions, Regional Inspectorates of Environment and Waters, Executive Agency for Fisheries and Aquaculture, Ministry of Internal Affairs, Border Police, etc.)

Indicator 1.4.3.* The necessary *legal** measures are taken if unauthorized activities are detected.

Documentary check:

- evidences that responsible control bodies are informed;
- administrative statements for found violation issued by the Organization

Field check

Criterion 1.5. The *Organization** shall comply with the *applicable national laws**, *local laws**, *ratified** international conventions and *obligatory codes of practice**, relating to the transportation and trade of forest products within and from the *Management Unit**, and/or up to the point of first sale. (C1.3 P&C V4)

Indicator 1.5.1 * There is evidence that the *Organization** complies with national legislation, local regulations and *ratified** international conventions relating to trade and transportation of forest products to the point of change of ownership.

Verifiers

Documentary check:

- evidences of past and current legal proceedings for non-compliance with the legislation;
- administrative acts for infringements of the national legislation and regulatory framework;
- written protocols for contradictions identified.

Field check:

- records of the *Organization**;

- sites where the timber is harvested and processed;
- transport infrastructure;
- protected areas , nurseries, etc. , related to law enforcement . (*refer to Annex 1, but is not limited only to it*)

Interviews with:

- *local communities**;
- employees of the *Organization** ;
- competent authorities and other relevant stakeholders.

Indicator 1.5.2.* The *Organization** complies with the provisions of the CITES Convention in the case of extraction and / or trade of species listed in the annexes of the Convention.

Verifiers

Documentary check:

- check of the species that are harvested;
- check if the species that are harvested are included in the annexes of CITES Convention;
- check if certificates are available in case of harvesting of species included in the Annexes CITES Convention.

Criterion 1.6. The *Organization** shall identify, prevent and resolve disputes over issues of statutory or customary law, which can be settled out of court in a *timely manner**, through engagement with *affected stakeholders**. (C2.3 P&C V4)

Indicator 1.6.1 A *publicly available* dispute** resolution mechanism is in place (for *disputes** including but not limited to those related to ownership of forests and lands, rights of use, and concessions), developed through *culturally appropriate* engagement** with *affected stakeholders**.

The mechanism includes, but is not limited to:

- Establishment of mutually acceptable means of communication with each community that allow two-way exchange of information;
- Ensuring equal representation and inclusion of all groups;
- Documentation of all meetings, all issues discussed and all consents achieved;
- Adoption of the content of the minutes of meetings, including specific steps to resolve the *dispute**; and
- Disclosure of the results of the stakeholder involvement activities.

Verifiers

Documentary check:

- availability of mechanism/*procedure**;
- evidences for stakeholder participation in the development of the mechanism;

Interviews with:

- *stakeholders**

Indicator 1.6.2.* There is clear evidence that, in cases where it is possible, the necessary actions are undertaken for timely and out of court resolution of *disputes** related to enforcement of applicable legislation, including legislation regulating *tenure** and land *use rights**.

Verifiers:

Documentary check:

- check if there are current *disputes**

Interviews with:

- *affected stakeholders**

Indicator 1.6.3* Such *disputes** as mentioned in 1.6.2 are either resolved or are in the *dispute** resolution process.

Verifiers:

Documentary check:

- check of the records

Interviews with:

*affected stakeholders**

Indicator 1.6.4. Up-to-date records of past and current *disputes** are maintained, including:

- Description of the steps taken to resolve *disputes**;
- Outcomes of *dispute** resolution processes, including agreed compensation; and
- Unresolved *disputes**, the reasons they are not resolved, and how they will be resolved.

Verifiers:

Documentary check:

- check of the records

Interviews with:

- *affected stakeholders*.*

Indicator 1.6.5.* In the case of out of court *disputes**, no operations are conducted in the disputed territory.

Verifiers:

Documentary check:

- orders to cease the activity in disputed sites

Field check:

- check on site if any activities are taking place in the disputed territory.

Interviews with:

- *affected stakeholders*.*

Indicator 1.6.6.* Operations cease in disputed territory in the case of court *disputes** where one of the parties has requested the suspension of operations.

Verifiers:

Documentary check:

- court decisions / orders to cease the activity in disputed sites, dossier of the *dispute**, etc.
- documents of court disputes related to tenue.

Field check:

- check on site if any activities are taking place in the disputed territory.

Interviews with:

- *affected stakeholders*.*

Criterion 1.7. The *Organization** shall publicize a commitment not to offer or receive bribes in money or any

other form of corruption, and shall comply with anti-corruption legislation where this exists. In the absence of anti-corruption legislation, The *Organization** shall implement other anti-corruption measures proportionate to the scale and intensity of management activities and the risk of corruption. (new)

Indicator 1.7.1 * A policy is developed and implemented that includes a commitment not to offer or receive bribes of any description nor any other form of corruption.

Note for *SLIMF:** The *Organization** declares its commitment not to offer or receive bribes of any description nor any other form of corruption.

Verifiers

Documentary check:

- availability of such policy.

Interviews with:

- *interested stakeholders**

Indicator 1.7.2. The policy meets or exceeds existing anti-corruption legislation.

Verifiers:

Documentary check:

- check of the policy ;

Interviews with:

- *interested stakeholders**

Indicator 1.7.3. The policy is *publicly available** at no cost.

Verifiers:

Documentary check:

- Check for the free public access of the policy.

Interviews with:

- *interested stakeholders**

Indicator 1.7.4.* Bribery, coercion and other acts of corruption do not occur.

Verifiers:

Documentary check:

- check for accusations / issued court decisions

Interviews with:

*interested stakeholders**

Indicator 1.7.5.* Corrective measures are implemented if corruption does occur.

Verifiers:

Documentary check:

- check for accusations / issued court decisions, measures taken.

Interviews with :

*- interested stakeholders**

Criterion 1.8. The *Organization** shall demonstrate a *long-term** commitment to adhere to the FSC Principles and Criteria in the *Management Unit**, and to related FSC Policies and Standards. A statement of this commitment shall be contained in a *publicly available** document made freely available. (C1.6 P&C V4)

Indicator 1.8.1 * There is a written document adopted by the managers of the *Organization**, reflecting the *long-term** commitment to the FSC Principles and Criteria and related Policies and Standards, including The Policy for the Association of Organizations with FSC.

Verifiers

Documentary check:

- Availability and accessibility of the document required and check to what extend the required elements are present (incorporated).

Indicator 1.8.2* The document required in 1.8.1 includes a commitment to avoid unacceptable activities, as follows:

- Illegal logging and trade in illegally harvested timber and NTFP;
- Violation of traditional and human rights in forest management operations;
- Significant change in the use of forests, unless such change is related to the construction of infrastructure of national importance, as well as sites related to national security and defense. (The scope of the change is in accordance with indicator 6.9.1.);
- Introduction of *genetically modified organisms*;*
- Violation of the Conventions of the International Labour Organization (ILO) as defined in the ILO Declaration on Fundamental Principles and Rights at Work.

The document also includes a commitment to timely reporting to FSC of unauthorized associations with FSC by other organizations (where these become known).

Verifiers:

Documentary check:

Availability and accessibility of the document required and check to what extend the required elements are present (incorporated).

Indicator 1.8.3.* The written document of the *long-term** commitment of the *Organization** to the FSC Principles and Criteria and related policies and standards is *publicly available** at no cost.

Verifiers:

Documentary check:

- Check the accessibility of the document.

Interviews:

- With employees and stakeholders.

Indicator 1.8.4 The *Organization** is not engaged in the unacceptable activities listed in 1.8.2 including in forest territories outside the scope of the certificate.

Verifiers:

Interviews:

With employees and stakeholders.

PRINCIPLE 2: WORKERS' RIGHTS AND EMPLOYMENT CONDITIONS

The *Organization** shall maintain or enhance the social and economic wellbeing of *workers**. (new)

Criterion 2.1. The *Organization** shall *uphold** the principles and rights at work as defined in the ILO Declaration on Fundamental Principles and Rights at Work (1998) based on the eight ILO Core Labour Conventions. (C4.3 P&C V4)

Indicator 2.1.1.* Employment practices and conditions for *workers** are in conformity with the principles and rights of work addressed in the eight ILO Core Labour Conventions and national labour legislation (see Annex 1 - List of applicable legislation).

Verifiers:

Documentary check:

- official statements of competent authorities on the observance of labor legislation; examination of inspection reports.
- court decisions on labour disputes incl. cases for illegal dismissals.

Interviews with:

- officials of the *Organization**;
- representatives of the Labor Inspectorate , the Commission for Protection against Discrimination, Trade unions and others.

Field check

Indicator 2.1.2.* *Workers*' rights to establish and/or join labour unions of their choice is guaranteed, subject only to the rules of the labour organization concerned.

Verifiers:

Documentary check:

- collective agreement;
- minutes of the general assembly.

Interviews with:

- *workers'** representatives and / or trade union leaders.

Indicator 2.1.3.* Agreements are implemented resulting from collective bargaining with representatives of trade unions and/ or other agreements concerning *workers**' rights and working conditions.

Verifiers:

Documentary check:

- agreements on collective bargaining.

Interviews with:

- *workers'** representatives and / or trade union leaders.

Criterion 2.2. The *Organization** shall promote *gender equality** in employment practices, training opportunities, awarding of contracts, processes of *engagement** and management activities. (new)

Indicator 2.2.1. The *Organization** promotes *gender equality** and prevents gender discrimination in employment practices, processes of *engagement**, training, awarding of contracts, and *management activities**.

Verifiers**:**

Documentary check:

- internal rules, rules on salary;
- job descriptions;
- training records;
- vacancy announcements .

Interviews with:

- *workers*.*

Indicator 2.2.2.* Job opportunities are open to both women and men under the same conditions.

Verifiers:

Documentary check:

- complaints/signals;
- job descriptions.

Interviews with:

- *workers** ;
- representatives of the Commission for Protection against Discrimination.

Indicator 2.2.3.* Work typically carried out by women (collecting *NTFP*,* sylvicultural activities, nurseries, etc.) is included in training and health & safety programs to the same extent as work typically carried out by men.

Verifiers:

Documentary check:

- training records.

Interviews with:

- *workers**;
- representative of the Commission for Protection against Discrimination

Indicator 2.2.4.* Women and men are paid the same wage, under the same conditions.

Verifiers:

Documentary check:

- documentation for wages paid;
- contracts;
- job descriptions;
- CVs, diplomas, certificates of qualifications gained and work experience.

Interviews with:

- *workers**/employees;
- representative of the Commission for Protection against Discrimination.

Indicator 2.2.5.* Women are paid directly and using mutually agreed methods (e.g. direct bank transfer, direct payments, cash, etc.).

Verifiers:

Documentary check:

- documentation for wages paid.

Interviews with:

- *workers**/employees ;
- representatives of the Commission for Protection against Discrimination.

Indicator 2.2.6.* Maternity leave is provided according to national legislation.

Verifiers:

Documentary check:

- documents proving that the right for maternity leave has been used.

Interviews:

- with *workers**/employees ;
- representatives of the Commission for Protection against Discrimination.

Indicator 2.2.7.* Men have the opportunity to take paternity leave.

Verifiers:

Documentary check:

- documents proving that the right fore paternity leave has been used.

Interviews:

- with *workers**/employees ;
- representatives of the Commission for Protection against Discrimination.

Indicator 2.2.8. Active participation of both genders in meetings and forums for decision-making is equally encouraged.

Verifiers:

Documentary check:

- invitations to participate in meetings, etc.

Interviews with:

- *workers**/employees;
- representative of the Commission for Protection against Discrimination.

Indicator 2.2.9.* Confidential, safe and effective mechanisms exist for reporting cases of sexual harassment and gender-based or other types of discrimination.

Note for *SLIMF:** The workers of the *Organization** are informed how to report cases of sexual harassment and gender-based or other types of discrimination.

Verifiers:

Documentary check:

- availability of written document/ internal procedures;
- Code of ethics of the *Organization**.

Interviews with:

- *workers**/employees to verify if there are such cases.

Indicator 2.2.10. *Workers** are familiar with the mechanism for reporting cases of sexual harassment and gender-based or other types of discrimination.

Verifiers:

Documentary check:

- e.g. lists of persons instructed;
- free access to the place where the written *procedures** related to *workers**' rights, the database of relevant national legislation etc. are being kept.

Interviews:

- with *workers**/employees.

Indicator 2.2.11.* Measures in all cases of sexual harassment and gender-based or other types of discrimination are undertaken in a timely and effective manner.

Verifiers:

Documentary check:

- complaint records, as well as evidences that these have been processed;
- accusations / issued court decisions, measures taken.

Interviews:

- with *workers**/employees.

Criterion 2.3. The *Organization** shall implement health and safety practices to protect *workers** from occupational safety and health hazards. These practices shall, proportionate to *scale, intensity and risk** of *management activities**, meet or exceed the recommendations of the ILO Code of Practice on Safety and Health in Forestry Work. (C4.2 P&C V4)

Indicator 2.3.1.* Health and safety practices are implemented that meet or exceed the ILO requirements on safety and health in forestry.

Verifiers:

Documentary check:

- contract with occupational health service/consultant or ensured own health service
- a program for risk assessment of the working places of the organization;
- health and safety instructions;
- program for conducting trainings and instructions – primary instructions, working place instructions, periodic, daily and occasional instructions;

Field check:

- check if the health and safety practices are observed by the *workers**

Interviews with:

- managers, employees and forest *workers**.

Indicator 2.3.2.* *Workers** are equipped with the necessary personal protective equipment and special clothing appropriate to the specifics of the assigned task. (see Annex 2 - Personal protective equipment)

Verifiers:

Documentary check:

- protocols confirming that clothing, equipment, etc. is provided.

Field check:

- aiming to verify if personal protective equipment is available in accordance with Appendix 2 of the Standard and it is in good condition.

Interviews with:

- *workers**/employees.

Indicator 2.3.3.* Use of personal protective equipment is required/enforced by the employer/contractor.

Verifiers:

Documentary check:

- Orders, job descriptions, instructions, etc.

Field check:

- to verify that personal protective equipment is available in accordance with Appendix 2 of the Standard and it is in good condition.

Interviews with:

- *workers**/employees.

Indicator 2.3.4.* There are documents and records related to health and safety practices, the recording of accidents and the time lost due to accidents.

Verifiers:

Documentary check:

- plans for instruction;
- schedules of the trainings on health and safety, etc.;
- evidences of periodically performed instructions and trainings on health and safety;
- up-to-date register of accidents.

Interviews with:

- *workers**/employees.

Indicator 2.3.5. The frequency and severity of accidents in the *FMU** do not exceed national levels for the forestry sector.

Verifiers:

Documentary check:

- register / records of accidents;
- publicly available statistics of the National Social Security Institute (operating register of National Social Security Institute).

Interviews with:

- *workers**/employees.

Indicator 2.3.6.* A periodic review is made and where necessary health and safety practices are revised on the basis of available objective data.

Verifiers:

Documentary check:

- documents which prove that health and safety practices are up-to-date;
- protocols for a comprehensive review of the policies and practices.

Indicator 2.3.7* After each accident a comprehensive review of policies and practices related to health and

safety is made and corrective measures are taken.

Verifiers:

Documentary check:

- documents which prove that health and safety practices are up-to-date;
- protocols for a comprehensive review of the policies and practices.

Criterion 2.4. The *Organization** shall pay wages that meet or exceed minimum forest industry standards or other recognized forest industry wage agreements or *living wages**, where these are higher than the *legal** minimum wages. When none of these exist, The *Organization** shall through *engagement** with *workers** develop mechanisms for determining *living wages**. (new)

Indicator 2.4.1.* Wages paid by *The Organization** are not lower than the minimum wage rates for the country in all circumstances.

Verifiers:

Documentary check:

- payrolls of *the Organization** or its subcontractors;
- check if the agreed salaries are not smaller than the minimum amounts established in the country.

Interviews with:

- employees, including employees of contractors and companies in the region;
- professional organizations;
- references to wage levels at the National Statistics Institute.

Indicator 2.4.2.* Wages and contributions paid by the *Organization** meet or exceed:

1) Minimum working wages for the state;

2) Officially recognized agreements for the forest sector, including collective workers' bargaining;

3) Officially agreed minimal *incomes for provision**

Verifiers:

Documentary check:

- payrolls of the organization or its subcontractors;
- check whether the amount of social security contributions is in accordance with the requirements for minimum insurance threshold for the position;
- collective labor agreements.

Interviews with:

- employees, including employees of contractors and companies in the region;
- professional organizations;

Indicator 2.4.3.* Wages, salaries and contracts are paid on time and at the level specified in contracts.

Verifiers:

Documentary check:

- contracts;
- trial balances, payment orders for wages, fees and social contributions;
- bank statements.

Interviews with:

- *workers**/employees of the *Organization** and subcontractors.

Indicator 2.4.4.* Payments for insurance, social contributions, business trips, overtime and other items as specified in contracts are paid on time.

Verifiers:

Documentary check:

- trial balances, payment orders for wages, fees and social contributions;
- bank statements;
- petty cash orders for business trips.

Interviews with:

- *workers**/employees of the *Organization** and subcontractors.

Criterion 2.5 The *Organization** shall demonstrate that *workers** have job-specific training and supervision to safely and effectively implement the *Management Plan** and all *management activities**. (C7.3 P&C V4)

Indicator 2.5.1.* A training programme ensuring that all *workers** contribute to the safe and effective implementation of the *planning documentation** is available and is implemented.

The programme is consistent with the job specific tasks and responsibilities of the *workers** (including subcontractors) and includes, but is not limited to, the elements listed in Annex 3 (see Annex 3 - Contents of the training program).

Note for *SLIMF:** The minimum content of the training program for *SLIMF** Organizations* complies with the requirements of Ordinance No. РД-07-2 from 16.12.2009 for instruction and training of *workers** for safe and healthy working conditions. However, this does not prevent the *SLIMF** *Organizations** from also applying Annex 3 of the standard when specific activities are implemented.

Verifiers:

Documentary check:

- check if training programme is available and if it includes all the elements;
- documentary evidences for update of the programme;
- check for trainings / coaching (records, lists of participants, etc.).

Interviews with:

- *workers** in the *Organization** and subcontractors.

Indicator 2.5.2.* Training of employees and forest *workers** is documented.

Verifiers:

Documentary check:

- trainings / coaching (records, lists of participants, etc.).

Indicator 2.5.3.* There is evidence that employees and forest *workers** operating in the *FMU** have appropriate education and qualifications to do their jobs.

Verifiers:

Documentary :

- check for documents such as diplomas, certificates, etc.
- job descriptions.

Interviews with:

- human resources specialist;
- *workers** in the *Organization** and subcontractors.

Criterion 2.6 The *Organization** through *engagement** with *workers** shall have mechanisms for resolving grievances and for providing *fair compensation** to *workers** for loss or damage to property, *occupational diseases**, or *occupational injuries** sustained while working for The *Organization**. (new)

Indicator 2.6.1.* There is a *publicly available** mechanism for conflict resolution developed through *culturally appropriate* engagement** with *workers** and employees.

Note for *SLIMF*: For *SLIMF* Organizations** no publicly *available** mechanism for conflict resolution is obligatory. However, *SLIMF* Organizations** are obliged to solve conflicts through engagement of *workers** and in a *culturally appropriate** way.

Verifiers:

Documentary check:

- check for *publicly available** mechanism;
- documents proving the involvement of *workers** in developing the mechanism.

Interviews with:

- *workers* in the *Organization**.

Indicator 2.6.2.* All complaints made by *workers** in the *Organization* * are addressed *promptly**, a decision is taken on them or they are in the *dispute** resolution process.

Verifiers:

Documentary check:

- complaints, records of *disputes**, orders etc..

Interviews with:

- *workers*/* employees.

Indicator 2.6.3. Up-to-date records of grievances related to loss or damage of property, *occupational diseases* and injuries** are maintained including:

- steps taken to resolve grievances;
- decisions on *disputes** including agreed compensation; and
- unresolved *disputes**, the reasons they are not resolved, and how they will be resolved.

Verifiers:

Documentary check:

- records.

Interviews with:

- *interested stakeholders**.

Indicator 2.6.4.* *Fair compensation** is provided to *workers** for work-related loss or damage of property and *occupational disease** or *injuries**.

Verifiers:

Documentary check:

- documents certifying paid compensation.

Interviews with:

- *interested stakeholders*.*

PRINCIPLE 3: INDIGENOUS PEOPLES'* RIGHTS – N/A for Bulgaria

PRINCIPLE 4: COMMUNITY RELATIONS

The *Organization** shall contribute to maintaining or enhancing the social and economic wellbeing of *local communities**. (P4 P&C V4)

Criterion 4.1. The *Organization** shall identify the *local communities** that exist within the *Management Unit** and those that are affected by *management activities**. The *Organization** shall then, through *engagement** with these *local communities**, identify their rights of *tenure**, their rights of access to and use of forest resources and *ecosystem services**, their *customary rights** and legal rights and obligations that apply within the *Management Unit**. (new)

Indicator 4.1.1.* *Local communities**, *affected* and *interested stakeholders** within and outside of the *Management Unit** are identified and documented.

Note: Annex 4 to the standard gives an indicative list of interested and affected parties.

Verifiers**:**

Documentary check:

- list of the *local communities**, *affected* and *interested stakeholders* * (names and contacts).

Interviews with:

- representatives of the *local communities**, *affected* and *interested stakeholders*.*

Indicator 4.1.2.* The *Organization** has identified and is aware of the rights of *local communities** and *affected stakeholders** including those related to ownership, the access to and use of forest resources and *ecosystem services**.

Verifiers:

Documentary check:

Check for the availability of the following documents:

1. Up-to-date map of the ownership of the *FMU**.
2. List of names and contacts of organizations, institutions, key representatives of the various *interested stakeholders** of the *local community**.
3. *Customary* and legal *rights** and obligations of the *local communities** and *interested stakeholders** for access to forests and use of forest resources and *ecosystem services** are identified, including:
   - Use of wood
   - Use of *non-timber forest products**
   - The right to hunt
   - Recreation and tourism
   - Free access
   - Places for gatherings , picnics and other cultural activities
4. Description of the rights and territories under *dispute**. Description of conflict.

Interviews with:

- Managers of the *Organization** and representatives of the *local communities**.

Indicator 4.1.3.* The *Organization** has engaged *local communities** and *affected stakeholders** in the

process of identifying their rights according to 4.1.2.

Verifiers:

Documentary check:

- minutes of meetings with *local communities**.

Interviews with:

- representatives of *local communities** to check if *local communities** were involved in the process of identifying their rights.

Criterion 4.2. The *Organization** shall recognize and *uphold** the *legal** and *customary rights** of *local communities** to maintain control over *management activities** within or related to the *Management Unit** to the extent necessary to protect their rights, resources, lands and territories. Delegation by *local communities** of control over *management activities** to third parties requires *Free, Prior and Informed Consent**. (C2.2 P&C V4)

Indicator 4.2.1.* *Local communities** are informed when, where and how they can comment on and request changes to forest *management activities**, and how they can participate in the planning process of forest *management activities** and working sites to the extent necessary to protect their rights, resources, lands and territories.

Verifiers:

Documentary check:

Documented proofs that *local communities** were given information about:

- upcoming development or revision of the forest management plan of the *FMU**;
- information on planned forestry activities and their venues (working places and forest sub-compartments) for next year.
- information about the *procedure** and time limits in which *local communities* and interested stakeholders* may submit written comments and proposals on the forest management plan in process of development and forest *management activities** and / or the annual forest management planning.;

Interviews with:

- representatives of the *local communities** and *interested stakeholders**.

Indicator 4.2.2.* Considering 4.2.1, *local communities** are informed in a *culturally appropriate** way.

Verifiers:

Interviews with:

- representatives of the *local communities** and *interested stakeholders**.

Indicator 4.2.3.* There is evidence that forest management planning reflects the proposals of the *local communities**, depending on their legality and appropriateness.

Verifiers:

Documentary check:

- registry of submitted proposals by local people and *interested stakeholders** related to the forest management plan;
- registry with answers to the *interested stakeholders** in relation to the proposals which they have made;
- minutes and lists of participants from public consultations and meetings related to the management

plan;
- changes made to the management plan as a result of the proposals of *interested stakeholders**.

Interviews with:
- representatives of the *local communities**.

Indicator 4.2.4.* The *legal** and *customary rights** of *local communities** to maintain control over *management activities** are not violated by the *Organization**.

Verifiers:

Documentary check:
- Documents proving that concrete corrective actions have been taken in case of identifying violations the rights of *local communities** related to the *management activities**

Interviews with:
- representatives of the *local communities**.

Indicator 4.2.5.* Where evidence exists that *legal** and *customary rights** of *local communities** related to *management activities** have been violated the situation is corrected, through *culturally appropriate** *engagement** and/or through the *dispute** resolution process in *Criteria** 1.6 or 4.6.

Verifiers:

Documentary check:
- complaints and grievances.
- minutes of meetings from consultation with *interested stakeholders**.

Interviews with:
- representatives of the *local communities**.

Indicator 4.2.6.* There are no cases of access to and / or passage through the *FMU** being denied by the *Organization** in violation of the *legal** and *customary rights** of citizens.

Verifiers:

Documentary check:
- registry and documentation related to submitted complaints.

Interviews with:
- representatives of the *local communities**.

Criterion 4.3. The *Organization** shall provide *reasonable** opportunities for employment, training and other services to *local communities**, contractors and suppliers proportionate to *scale** and *intensity** of its *management activities**. (C4.1 P&C V4)

Indicator 4.3.1. Appropriate opportunities for employment, training and other services are discussed and submitted to the *local communities**, contractors and suppliers.

Verifiers:

Documentary check:
- lists of contractor's *workers** who have been instructed;
- photos , programs and lists of trainings, checklists, etc.
- policies / strategies for recruitment ;
- evidences in local media that *local communities** were informed about the job opportunities, trainings

and services;
- job advertisements in the labor office
- evidences for recruitment of employees from the *local communities**;

Interviews with:
- *local communities**, with *workers** and employees of contractors.

Indicator 4.3.2.* There is evidence that local people are preferred in case of recruitment for a vacancy, when candidates are equal in terms of education and professional experience.
Verifiers:
Interviews with:
- *local communities**, with *workers** and employees of contractors.

Criterion 4.4. The *Organization** shall implement additional activities, through *engagement** with *local communities** that contribute to their social and economic development, proportionate to the *scale*, intensity** and socio-economic impact of its *management activities**. (C4.4 P&C V4)

Indicator 4.4.1. Opportunities for local social and economic development are identified by the *Organization** through *culturally appropriate* engagement** with *local communities** and other relevant organizations.
Verifiers:
Documentary check:
- report on the social impact assessment of the activity of the *Organization** or other analyzes.

Interviews with:
- management staff and employees of the Organization*(incl. if they are acquainted with the regional and municipal development plans) ;
- with *local communities** and stakeholders.

Indicator 4.4.2. Projects and additional activities that contribute to local social and economic benefit are implemented and/or supported by the *Organization*.* These projects and additional activities are proportionate to the socio-economic impact of the forest *management activities**.
Verifiers:
Documentary check:
- activities supporting local socio-economic developments (incl. local initiatives and events) are stipulated (planned) in the financial documents of the *Organization*;*
- protocols, acts of donation, thank you letters and other documents proving material support by the *Organization* * for the local community.

Interviews with:
- management staff of the *Organization** ;
- representatives of the *local communities**.

Criterion 4.5. The *Organization**, through *engagement** with *local communities**, shall take action to identify, avoid and mitigate significant negative social, environmental and economic impacts of its *management activities** on affected communities. The action taken shall be proportionate to the *scale, intensity and risk** of those activities and negative impacts. (C4.4 P&C V4)

Indicator 4.5.1. The *Organization** applies a system for Impact assessment corresponding to the *scale** and

*intensity** of forest management operations. The system includes the following:

- identification of the affected groups;
- consultations with representatives of the affected groups in a *culturally appropriate** way;
- identification of the negative social, environmental and economic impacts of forest *management activities** on these groups.

The assessment includes, but is not limited to the components listed in Annex 5.

Verifiers:

Documentary check:

- documented social impact assessment;
- documented meetings with *local communities** and other *interested stakeholders**, where the potential negative impacts of forest *management activities** has been discussed;
- list of identified negative impacts.

Indicator 4.5.2. * The *Organization** develops and implements measures to prevent and reduce negative impacts of forest *management activities** identified under 4.5.1. The measures are developed through *engagement** with *local communities**.

Note for *SLIMF:** For *SLIMF** *Organizations** the requirement of the indicator is as follows: The *Organization** develops and implements measures to prevent and reduce negative impacts of forest *management activities**.

Verifiers:

Documentary check:

- publications in local media, pictures of joint events and other evidences of collaboration between *FMU** and the local community;
- document with measures developed to reduce the impact of identified negative effects.

Field check:

- measures taken to reduce the impact of the identified negative effects.

Interviews with:

- representatives of *local communities** and employees of the *Organization**

Criterion 4.6. The *Organization**, through *engagement** with *local communities**, shall have mechanisms for resolving grievances and providing *fair compensation** to *local communities** and individuals with regard to the impacts of *management activities** of The *Organization**. (C4.5 P&CV4)

Indicators* 4.6.1. A *publicly available** written *dispute** resolution *procedure** is in place, developed through *culturally appropriate** *engagement** with *local communities**.

Note for *SLIMF:** For *SLIMF** *Organizations** the requirement of the indicator is as follows: The *Organization** undertakes to solve conflicts through *engagement** with *local communities** in a *culturally appropriate** way.

Verifiers:

Documentary check:

- existence of a written *procedure** for *dispute** resolution and a mechanism for compensation of *affected stakeholders* *;
- written evidence that the *procedure** has been consulted with *local communities** (minutes of meetings,

lists of participants, photos, etc.);

- web-site/information board of the *Organization**.

Interviews with:

- managers of the *Organization** ;
- representatives of the *local communities** .

Indicator 4.6.2.* Grievances related to the impacts of *management activities** are resolved within the timescale and sequence of the procedure* according to 4.6.1.

Note for *SLIMF:** For *SLIMF** *Organizations** the requirement of the indicator is as follows: Grievances related to impacts from *management activities** are considered and resolved in a *timely manner*.*

Verifiers:

Documentary check:

- registry of grievances/complaints and the responses to them;
- minutes of meeting with *affected stakeholders*.*

Interviews with:

- personnel of the *Organization** ;
- representatives of the *local communities** .

Indicator 4.6.3. Up-to-date documentation on grievances related to forestry activities is maintained, including:

1. Actions taken to resolve *disputes**;
2. The results of all completed *procedures** for resolving *disputes**, including provision of *fair compensation**;
3. Unresolved *disputes**, the reasons they are not resolved, and the necessary follow-up actions.

Verifiers:

Documentary check:

- register of complaints and responses to complaints as per the requirements of the indicator;
- dossiers of disputes.

Interviews with:

- staff of the *Organization** and representatives of the *local communities**.

Indicator 4.6.4. A mechanism exists and is implemented when negotiating and providing *fair compensation** to *local communities**, natural and legal persons when their legal rights, property, resources or livelihoods are negatively influenced / affected by forest *management activities**.

Verifiers:

Documentary check:

- documented mechanism and *procedures** for compensation;

Interviews with:

- *affected stakeholders* * and managers of the *Organization** .

Indicator 4.6.5.* In disputed territories (regarding *disputes** related to the impact of forest *management activities**), no forest *management activities** take place until consent is reached by written agreement or until a final administrative or judicial decision is issued.

Verifiers:

Documentary check:

- documented *procedure**, incl. decisions and orders of the managers of the *Organization* *.
- documents of the leading cases and *disputes**, media publications, pictures, records of meetings of the disputing parties, agreements;
- documents from cases and *disputes**, media publications, photos, minutes of meetings of the disputing parties, agreements.

Field check:

- check if any activities take place in disputed territories.

Interviews with:

- *local communities** and/or *affected stakeholders**.

Criterion 4.7. The *Organization**, through *engagement** with *local communities**, shall identify sites which are of special cultural, ecological, economic, religious or spiritual significance, and for which these *local communities** hold *legal** or *customary rights**. These sites shall be recognized by The *Organization**, and their management and/or *protection** shall be agreed through *engagement** with these *local communities**. (new)

Indicator 4.7.1.* Sites of special cultural, ecological, economic, religious or spiritual significance for which *local communities** hold *legal** or *customary rights** are identified through *culturally appropriate** *engagement** and are recognized by *The Organization**.

Note for *SLIMF:** The indicator is obligatory only for *SLIMF** public forests.

Verifiers:

Documentary check:

- *HCV** 6 in the *HCVF** Report;
- minutes of meetings with local people and field visits;
- maps and photos;

Interviews with:

- representatives of *local communities**, tourist associations, etc.

Indicator 4.7.2.* Measures for management and / or *protection** of sites under 4.7.1 are developed and implemented through *culturally appropriate* engagement** with *local communities**. When *local communities** determine that physical identification of sites in documentation or on maps would threaten the value or *protection** of the sites, then other means will be used.

Note for *SLIMF:** The indicator is obligatory only for *SLIMF** public forests.

Verifiers:

Documentary check:

- documented measures for *protection** and management of sites under 4.7.1;
- documented evidences that the measures for *protection** and management of sites under 4.7.1 are agreed/approved by the *local communities** (e.g. invitations and minutes of public discussions).

Field check

Interviews with:

- representatives of *local communities**.

Indicator 4.7.3.* Whenever sites of special cultural, ecological, economic, religious or spiritual significance

are newly observed or discovered, *management activities** cease immediately in the vicinity until protective measures have been agreed to with the *local communities**, and as directed by *local* and *national laws**.

Verifiers:

Documentary check:

- documented *procedures** for ceasing the forest *management activities** in the vicinity of newly discovered cultural or archeological objects;
- documented cases of newly discovered sites of importance to *local communities** where forestry activities were ceased.

Field check

Interviews

- with representatives of *local communities**.

PRINCIPLE 5: BENEFITS FROM THE FOREST

The *Organization** shall efficiently manage the range of multiple products and services of the *Management Unit** to maintain or enhance *long-term** *economic viability** and the range of social and environmental benefits. (P5 P&C V4)

Criterion 5.1. The *Organization** shall identify, produce, or enable the production of, diversified benefits and/or products, based on the range of resources and *ecosystem services** existing in the *Management Unit** in order to strengthen and diversify the local economy proportionate to the *scale** and *intensity** of *management activities**. (C5.2 and 5.4 P&C V4).

Indicator 5.1.1. The range of timber and *non-timber products** and *ecosystem services** that could strengthen and diversify the local economy is identified in written form.

Verifiers:

Documentary check:

- *management objectives** set out in the forest management plan;
- assessment of timber and non-timber resources and *ecosystem services** in the forest management plan;
- regional development plans for forests;
- protected areas management plans, Natura 2000 sites management plans;
- Hunting management plan;
- *HCVF** Report.

Interviews:

- check whether staff, management, local people and businesses are aware of the kinds of resources and services within the territory of the *FMU**.

Indicator 5.1.2.* Consistent with the *management objectives**, the identified timber and non-timber resources and *ecosystem services** are used by *The Organization** and/or are made available for others to use, thus helping to strengthen and diversify the local economy.

Verifiers:

Documentary check:

- Forest management plan / program;
- contracts with Contractors;

- management Contracts;
- lease contracts;
- financial documents;
- check of the companies that the *Organization** works with – whether they are local companies.

Field check:

- check if there are local companies;
- check exactly what resources and services are used and whether they meet *management objectives**.
- check if there are any damages to some of the other values - such as species *protection**, other *ecosystem services**, etc.

Interviews:

- interviews provide information on whether staff and *workers** who work in the forests are local.
- with local logging and wood processing companies, traders and processors of *non-timber forest products* *.
- with hunting and fishing associations, tenants and others.

Indicator 5.1.3.* Extraction and / or use of forest resources and *ecosystem services* * is not permitted if such use would have a negative impact on objectives related to their *conservation** or *protection**.

Verifiers:

Documentary check:

- *management objectives** set out in the forest management plan;
- inventory and assessment of the levels of use of forest resources;
- inspection of the yield of timber and *non-timber forest products**;
- impact assessment of yields and / or use of forest resources and *ecosystem services* * for industrial / commercial purposes

Interviews:

- with the aim to collect evidences / opinions about negative consequences of the exploitation of resources and services on the territory of *FMU**

Indicator 5.1.4.* When *The Organization** makes FSC promotional claims regarding the maintenance and / or enhancement of *ecosystem services**, Annex 6 is followed regarding additional requirements.

Verifiers:

Documentary check:

- to verify compliance with the requirements of Annex 6 of the standard (Annex 6 - Additional requirements for certification of ecosystem services).

Criterion 5.2. The *Organization** shall normally harvest products and services from the *Management Unit** at or below a level which can be permanently sustained. (C5.6 P&C V4)

Indicator 5.2.1.* *Timber harvesting levels** for the duration of the forest management plan/program are based on an analysis of the inventory of timber resources in terms of growth, productivity, levels of residues and maintenance of forest *ecosystem functions**.

Verifiers:

Documentary check:

- *planning documentation** related to the inventory of timber resources and justification of the total harvesting of timber, as well as the choice of species.

Indicator 5.2.2.* Based on the *timber harvesting levels** for the duration of the forest management plan, annual allowable cut is determined and is justified in terms of *sustainable yield** of timber, so that harvest rates will not exceed growth.

Verifiers:

Documentary check:

- *planning documentation** related to the inventory of timber resources and justification of the total harvesting of timber, as well as the choice of species.
- forest management plans: is the average annual cut adjusted according to the identified *protected** and *threatened** species and *HCV** forests?

Indicator 5.2.3.* Actual annual harvest levels for timber are recorded (including sites, period of harvesting, tree species, assortments, quantities and relevant documentation) and this information is available for the duration of the forest management plan / program.

Verifiers:

Documentary check:

- annual reports or other documentation providing information about the actual yields of timber;
- minutes from inspections of control bodies.

Interviews with:

- staff of the *Organization** and representatives of control bodies.

Indicator 5.2.4.* The sum of annual yields of timber for the duration of the forest management plan / program does not exceed the total *timber harvesting levels** as defined under 5.2.1. and 5.2.2

Note: Exceptions are permitted only in the cases of *large scale natural disturbances** that cannot be compensated by the planned total harvesting levels for the period of the current forest management plan. The volumes of the damaged wood have to be considered in the next forest management plan.

Verifiers:

Documentary check:

- *planning documentation** related to the inventory of timber resources and justification of the total harvesting of timber , as well as the choice of species;
- annual reports or other documentation providing information about the actual yields of timber;
- minutes from inspections of control bodies;
- documented justification and evidences in the case of exceeding the annual harvesting rate;
- register of felling carried out.

Interviews with:

- With staff of the *Organization** and representatives of control bodies.

Indicator 5.2.5.* *Sustainable harvesting levels** of *non-timber forest products** and services, which are controlled by the *Organization* *, are determined *using best available information**, and are respected and controlled. Information is used from:

- Ministry of Environment and Waters (official orders for the annual allowed quotas for extraction for medicinal plants);

- Game management plans and annual inventories of game populations.

Verifiers:

Documentary check:

- *planning documentation** related to the determination and justification of the total and annual harvest levels of *NTFP* * and the choice of species.
- reports and results of local studies about *NTFP**.
- check the data about the harvested amounts of *NTFP* * per year for the duration of the forest management plan.
- in the case of exceeding the annual harvesting rate check for documented justification.

Interviews:

- provide information on whether staff and *workers** are aware of the quantities *NTFP** specified for use. How the harvesting is allowed and how it is controlled?

Criterion 5.3. The *Organization** shall demonstrate that the positive and negative *externalities** of operations are included in the *management plan**. (C5.1 P&C V4)

Indicator 5.3.1. *Planning documentation** includes an analysis that takes into account the positive and negative social *externalities** of the implementation of forest *management activities**. *Local communities** are given the opportunity to comment on the results of the analysis.

Verifiers:

Documentary check:

- *planning documentation** includes assessment about positive and negative impacts from the implementation of forest *management activities** in terms of social perspective.
- strategy and studies / reports or social survey about possible positive and negative effects of forest *management activities** in the social aspect.
- *HCVF** Report, particularly HCV5 and 6. Does it include threats and recommended actions?

Field check:

- check what actions for prevention, limitation or compensation are taken in case of presence of negative consequences in social terms.

Interviews:

- provide information on whether staff and *workers** are familiar with the actions to be taken for the prevention, limitation or compensation of the negative consequences in social terms.

Indicator 5.3.2. *Planning documentation** includes an analysis that takes into account the positive and negative environmental *externalities** of the implementation of forest *management activities**. *Local communities** are given the opportunity to comment on the results of the analysis.

Verifiers:

Documentary check:

- *planning documentation** includes assessment about positive and negative impacts from the implementation of forest *management activities** in terms of environmental perspective.
- strategy and studies / reports or social survey about possible positive and negative effects of forest *management activities** in the environmental aspect.
- *HCVF** Report, particularly part HCV1 and 3. Does it include threats and recommended actions?

Field check:

- check what actions for prevention, limitation or compensation are taken in case of presence of negative consequences in environmental terms.

Interviews:

- provide information on whether staff and *workers** are familiar with the actions to be taken for the prevention, limitation or compensation of the negative consequences in environmental terms.

Indicator 5.3.3. The annual financial plan provides for costs of prevention, limitation or compensation of negative social or environmental *externalities** resulting from forest *management activities**.

Verifiers:

Documentary check:

- *planning documentation** includes assessment about positive and negative impacts from the implementation of forest *management activities**;
- reports / studies about possible positive and negative effects of forest management operations
- annual financial plan *of the Organization**.

Criterion 5.4. The *Organization** shall use local processing, local services, and local value adding to meet the requirements of The *Organization** where these are available, proportionate to *scale, intensity and risk**. If these are not locally available, The *Organization** shall make *reasonable** attempts to help establish these services. (C5.2 P&C V4)

Indicator 5.4.1. There is evidence that part of the yield and sale of timber and *NTFP** is provided to local companies (processors / consumers), local goods, services and processing facilities are used so that added value is generated, without prejudice to national legislation.

Verifiers:

Documentary check-up:

- financial documents;
- procurement *procedures** for use of timber of local merchants;
- contracts signed with local companies;
- timetable for the sites that are available for harvesting and sale of timber to local traders;
- tender documentation;
- applications of local merchants;
- register of the quantities sold timber and *non-timber forest products** to local markets.

Field check:

- check whether the services of local companies are used, whether local people are employed.

Interviews:

- with local business and *interested stakeholders**.

Indicator 5.4.2. If no local goods, local services or processing facilities to generate added value exist, the *Organization** makes *reasonable** attempts through provision of information about possibilities to establish such.

Verifiers:

Documentary check:

- financial documents;
- support for participation in projects;
- minutes of meetings with local business/ municipality;
- correspondence with local companies.

Interviews with:

- local business and *interested stakeholders*.*

Criterion 5.5. The *Organization** shall demonstrate through its planning and expenditures proportionate to *scale, intensity and risk**, its commitment to *long-term* economic viability**. (C5.1 P&C V4)

Indicator 5.5.1. The management of the *FMU** is based on a financial plan / budget which allocates funds to ensure implementation of activities included in the *planning documentation** and standard requirements, and ensures *long-term* economic viability**.

Verifiers:

Documentary check:

- financial documents
- budget of the *Organization*.*

Interviews with:

- managers and accountants of the *Organization*.*

Indicator 5.5.2. Expenditures and investments are made to implement the activities included in the *planning documentation**, to meet the requirements of the standard and to ensure *long-term* economic viability**.

Verifiers:

Documentary check:

- financial documents
- budget of the *Organization*.*

Interviews with:

- managers and accountants of the *Organization*.*

Indicator 5.5.3. Estimated revenues consider market trends and are sufficient to cover expenses and investments for forest management and to ensure *long-term* economic viability**.

Verifiers:

Documentary check:

- financial documents
- budget of the *Organization*.*

Interviews with:

- managers and accountants of the *Organization*.*

PRINCIPLE 6: ENVIRONMENTAL VALUES AND IMPACTS

The *Organization** shall maintain, conserve and/or *restore* ecosystem services** and *environmental values** of the *Management Unit**, and shall avoid, repair or mitigate negative environmental impacts. (P6 P&C V4)

Criterion 6.1. The *Organization** shall assess *environmental values** in the *Management Unit** and those values outside the *Management Unit** potentially affected by *management activities**. This assessment shall be undertaken with a level of detail, scale and frequency that is proportionate to the *scale, intensity and risk**

of *management activities**, and is sufficient for the purpose of deciding the necessary conservation measures, and for detecting and monitoring possible negative impacts of those activities. (new)

Indicator 6.1.1.*

*Best available information** is used to identify environmental values that are potentially affected by *management activities**, within and outside of the *Management Unit**, including:

1. Forest *ecosystem functions**
2. *Biological diversity**
3. Water resources
4. Soils
5. *Landscape values**

Note: See Annex 12 for a list of sources of *best available information** for defining the *environmental values**.

Note for *SLIMF:** For *SLIMF** *Organizations** only point 2 and 3 of the indicator are obligatory.

Verifiers:

Documentary check:

- Availability and comprehensiveness of the identified *environmental values** (Notes of the auditor whether such information is incorporated in the *planning documentation**).

Interviews:

- Provides information if the staff and the *workers** are acquainted.

Indicator 6.1.2 * The information about *environmental values** defined in 6.1.1 has a level of detail and is assessed at a frequency so that:

1. Impacts of *management activities** on the identified *environmental values** can be assessed as per Criterion* 6.2;
2. *Risks** to *environmental values** can be identified as per Criterion* 6.2;
3. Necessary *conservation** measures to protect values can be identified as per Criterion* 6.3; and,
4. Monitoring of impacts or environmental changes can be conducted as per Principle* 8.

Verifiers:

Documentary check:

- Check about the relevance of the information gathered;
- Check if there were any consultations with local and national experts, *interested stakeholders**, etc.

Interviews:

- With staff /responsible person

Criterion 6.2. Prior to the start of site-disturbing activities, The *Organization** shall identify and assess the *scale, intensity and risk** of potential impacts of *management activities** on the identified *environmental values**. (C6.1 P&C V4)

Indicator 6.2.1* Prior to the start of site-disturbing activities, an environmental impact assessment identifies potential present and future impacts of *management activities** on *environmental values**, from the stand level to the *landscape** level. In cases where this is required by national legislation, a formal Environmental Impact Assessment (EIA), Ecological Assessment (EA), Appropriate Assessment (AA), etc. are / is conducted.

Verifiers:

Documentary check:

- Check written documents in connection to the assessment as per 6.2.1; availability of EIA, EA, AA, etc., if such are required by the national legislation.

Interviews:

- Provides information if the staff and the *workers** are acquainted.

Criterion 6.3. The *Organization** shall identify and implement effective actions to prevent negative impacts of management activities* on the *environmental values**, and to mitigate and repair those that occur, proportionate to the *scale, intensity and risk** of these impacts. (C6.1 P&C V4)

Indicator 6.3.1.* *Management activities** are planned and implemented to prevent negative impacts and to protect *environmental values**. The *protection** measures planned are included in the relevant technical documentation.

Verifiers:

Documentary check:

- Check of the *planning documentation** and the documents about technological implementation of the activities.

Field check:

Check the following:

- Loss and damage of the *biological diversity**;
- Loss of productive area;
- Soil compaction and disturbance;
- Loss of fertility and food base;
- Impact on the hydrological regime;
- Soil erosion;
- Damages and disturbances in areas with special regime, etc.;

Interviews with:

- Staff and *workers** if and to what extend are familiar with the requirements and implementation of measures for *protection** of *environmental values**;
- Regional inspectorate on environment and water (RIEW) about identified negative impacts;
- Environmental and other NGOs.

Indicator 6.3.2.* Where negative impacts on *environmental values** occur, measures are taken to mitigate or prevent further damage, and/or damaged values are repaired.

Verifiers:

Documentary check:

- Check of the technical documentation, protocols etc.;
- Check of mitigation measures planned.

Field check:

- Check about existence of negative impacts and implementation of mitigation measures planned.

Interviews:

- provides information if the staff and the *workers** are acquainted.

Criterion 6.4. The *Organization** shall protect *rare species** and *threatened species** and their *habitats** in the *Management Unit** through *conservation zones*, protection areas*, connectivity** and/or (where necessary) other direct measures for their survival and viability. These measures shall be proportionate to the *scale, intensity and risk** of *management activities** and to the conservation status and ecological requirements of the *rare** and *threatened species**. The *Organization** shall take into account the geographic range and ecological requirements of *rare** and *threatened species** beyond the boundary of the *Management Unit**, when determining the measures to be taken inside the *Management Unit**. (C6.2 P&C V4)

Indicator 6.4.1.* *Best Available Information** is used to identify *rare**, *threatened** and *protected species**, and their *habitats**, that are present or likely to be present within and adjacent to the *FMU**.

Note: *Rare**, *threatened** and *protected species** are listed in the Bulgarian Biodiversity Act, Red Data Book of the Republic of Bulgaria, CITES Convention list, Bonn convention list, Bern Convention, and / or other lists at a national or European level.

Verifiers:

Documentary check:

- *HCVF** report, management plans of protected areas and Natura 2000 sites and other specialized studies and maps.
- Check whether and to what extend the information has been incorporated into the *planning documentation**.

Field check:

- Check the presence and the status of species identified under 6.4.1.

Interviews with:

- Staff and *workers**, incl. these of the subcontractors if they are familiar with the presence of *rare**, *threatened** and *protected species** and their *habitats**;
- *Interested stakeholders*.*

Indicator 6.4.2.* Potential impacts of *management activities** on *rare**, *threatened** and *protected species** and their conservation status and *habitats** are identified.

Verifiers:

Documentary check:

- *HCVF** Report, technological and other relevant documentation.

Field check:

- To what extend forest *management activities** are implemented to avoid negative impacts.

Interviews:

- To what extend the staff and *workers** of the subcontractors are aware of the possible impacts of forest *management activities** on *rare**, *threatened** and *protected species**.

Indicator 6.4.3* *Management activities** are modified to avoid the causes of negative impacts.

Verifiers:

Documentary check:

- *HCVF** Report, technological and other relevant documentation.

Field check:

- To what extend forest *management activities** are carried out in a way avoiding negative impacts.

Indicator 6.4.4.* Measures for *protection** of the identified *rare**, *threatened** and *protected species** and their *habitats** are applied, including through the provision of *conservation** zones, *protection areas**, *connectivity**, and other direct means for their survival and viability, such as species' recovery programs. Measures are proportionate to the *scale*, intensity** and *risk** of the activities that are implemented.

Verifiers:

Documentary check:

- Check of the *planning documentation** and maps; *restoration** programmes, etc.

Field check:

- To what extend forest *management activities** are carried out in a way avoiding negative impacts; check to what extend are observed the regimes in the established protected areas and Natura 2000 sites;
- Review of the implementation of the planned measures.

Interviews:

- Provides information if the staff and the *workers** are acquainted.

Indicator 6.4.5 A range of measures is developed and applied to prevent hunting, fishing, trapping and collection of *rare**, *threatened** and *protected species**.

Verifiers:

Documentary check:

- Check if *procedures** are in place for prevention of the activities described in the indicator;
- Check the observation protocols, analysis, etc.;
- Check for the presence of documents certifying the implementation of the developed measures for prevention (schedules about duties during weekends, records of findings for checks carried out, restricting access to forest areas with *HCV** etc.

Interviews with:

- Ctaff and *workers**;
- *Interested stakeholders** and control institutions (Regional inspectorate on environment and water, Regional Forestry Directorate, etc.).

Criterion 6.5 *The Organization** shall identify and protect representative sample areas of native *ecosystems** and/or *restore** them to more *natural conditions**. Where *representative sample areas** do not exist or are insufficient, *The Organization** shall *restore** a proportion of the *Management Unit** to more *natural conditions**. The size of the areas and the measures taken for their protection or *restoration**, including within *plantations**, shall be proportionate to the conservation status and value of the *ecosystems** at the *landscape** level, and *the scale, intensity and risk** of *management activities**. (C6.4 and 10.5 P&C V4 and Motion 2014#7)

Indicator 6.5.1.* *Best available information** is used to identify all natural *ecosystems** within the *FMU** that exist in natural environmental conditions or that existed previously but are now degraded due to *natural disturbances** or anthropogenic impact.

Verifiers:

Documentary check:

- *HCVF** Report, specialized studies, etc.;
- Maps;
- Forest management plan.

Field check:

- Check the presence and status of the identified areas as described in the indicator.

Interviews:

- provide information if the staff and the *workers** are acquainted.

Indicator 6.5.2.* *The Organization** ensures the *protection** of *representative sample areas** of all natural *ecosystems** present within the *FMU**.

Verifiers:

Documentary check:

- *HCVF** report
- Nature 2000 standard data forms;
- Management plans of Protected areas and Natura 2000 sites;
- Forest regional plan for development;
- FMP (*protection** of these sample areas is incorporated in the FMP);
- Maps of the identified *old-growth forests**
- *Planning documentation** and maps;
- Programs for *restoration**/reintroduction;
- Check of issued felling permissions (through the website of the Executive Forest Agency).

Field check:

- Are there any activities taking place in the *old-growth forests**?
- What activities are implemented for *protection** of the *representative sample areas**

Interviews:

- Provide information if the staff and the *workers** are acquainted.

Indicator 6.5.3. The size of each of the protected *representative sample areas** of natural ecosystems *and each one of the restoration areas** is determined according to its *conservation** and ecological value. This value is determined for each *ecosystem** at the level of the *landscape** and *FMU**.

Note: The aim is to preserve the *rare** and vulnerable *ecosystems**, as well as *representative samples** of *ecosystems** that are well presented and in *favourable conservation status**. (please, consider Annex 11)

Note: For identified ecosystems according to 6.5.1 for which *representative sample areas** are lacking within the *FMU**, *restoration areas** are included and the *Organization** plans *restoration** activities for them.

Verifier:

Documentary check:

- Maps, *HCVF** Report, etc.

6.5.4. At least 5% of the area of the *Management Unit** is designated as *old-growth forests (OGF)** where human interference is not allowed.

Note: The 5% *OGF** where human interference is not allowed are identified according to the requirements

of Principle 9 (see Annex 13 – National *HCVF** toolkit, Section HCV 3). In the absence of forests having the characteristics of *old-growth forests** within the certified *Management Unit**, the *Organization** must identify forests with potential to become *old-growth forests**. These must be managed in a way leading to their transformation into *old-growth forests**. In these stands forest *management activities** and wood extraction are not allowed, except in the cases *of large-scale natural disturbances** affecting over 30% of the area of the respective *old-growth forests**.

Verifiers:

Documentary check:

- Maps, *HCVF** Report, etc.

Field check:

- Check the respective territories identified.

Interviews:

- Provide information if the staff and the *workers** are acquainted.

Indicator 6.5.5* The *representative sample areas** of natural *ecosystems** are at least 10% of the area of the *Management Unit**. In those areas forest *management activities** are not allowed except for activities for *restoration** of the forest to more natural conditions. *OGF** identified according to 6.5.4 may be an addition to these areas or may be included as part of them.

Note for *SLIMF*: For *FMUs** smaller than 50 ha the requirement of the indicator is reduced to 5% forests in which human interference is not allowed.

Verifiers:

Documentary check:

- Maps, *HCVF** Report, etc.

Field check:

- Check the respective territories identified.

Interviews:

- Provide information if the staff and the *workers** are acquainted.

Indicator 6.5.6.* Where *representative sample areas** of natural *ecosystems** do not exist, or where existing samples inadequately represent the natural *ecosystems**, the *Organization** *restores** portions of the *FMU** to more *natural conditions** until the requirements regarding areas in Indicator 6.5.5 are met.

Verifiers:

Documentary check:

- Maps, *HCVF** Report, etc.

Field check:

- Visit of the territories stipulated and managed aiming at the *restoration** of natural *ecosystems**.

Indicator 6.5.7. *Representative samples areas** of natura*l ecosystems** are shown on forest maps.

Verifiers:

Documentary check:

- Maps.

Criterion 6.6. *The Organization** shall effectively maintain the continued existence of naturally occurring *native species** and *genotypes**, and prevent losses of *biological diversity**, especially through *habitat**

management in the *Management Unit**. *The Organization** shall demonstrate that effective measures are in place to manage and control hunting, fishing, trapping and collecting. (C6.2 and C6.3 P&C V4)

Indicator 6.6.1*. Forest *management activities** maintain the features of the plant communities and *habitats** in the native *ecosystems** within the *FMU*.*

Verifiers:

Documentary check:

- Check if in the *planning documentation** are described the features of the plant communities and *habitats** and if forest *management activities** that could negatively impact naturally occurring species are assessed.

Field check:

- Check if the features of the plant communities and *habitats** in the natural *ecosystems** are significantly influenced by the forest *management activities** .

Interviews:

- Provide information if the staff and the *workers** are acquainted with the requirement of the indicator.

Indicator 6.6.2.* In cases where the management of the *FMU* * in the past has led to destruction of natural plant communities or *habitat features**, measures for their *restoration** are undertaken.

Verifiers:

Documentary check:

- *Planning documentation*.*

Field check:

- Check if *restoration** measures are in place.

Interviews:

- Provide information if the staff and the *workers** are acquainted with the requirement of the indicator.

Indicator 6.6.3.* Forest *management activities** maintain, enhance, or *restore** *habitat features** of native *ecosystems**, with the aim of maintaining the diversity of naturally occurring species and their genetic diversity.

Verifiers:

Documentary check:

- *Planning documentation*.*

Field check:

- Check whether the activities for maintenance, improvement or *restoration** of *habitat features** of *native ecosystems*,* specified in the *planning documentation** are implemented.

Interviews:

- Provide information if the staff and the *workers** are acquainted.

Indicator 6.6.4. Up-to-date information is available on hunting, fishing, setting traps and collection of species, including allowable quotas of use.

Verifiers:

Documentary check-up:

- Game hunting data;
- Acts of poaching;
- Permits for collection of herbs from the list of medicinal plants;

- Annual license for collection of mushrooms and non-medicinal plants and others.

Interviews:

- Provide information if the staff and the *workers** are acquainted.

Indicator 6.6.5.* Effective measures are taken to restrict hunting within the annual game management plan. Measures to control fishing, trapping and collection of species are implemented in a way ensuring the existence and natural distribution of *native species** and their genetic diversity.

Note for *SLIMF*: *SLIMF* Organizations** are only obliged to implement effective measures to prevent trapping.

Verifiers:

Documentary check:

- Game hunting data;
- Acts of poaching;
- Permits for collection of herbs from the list of medicinal plants;
- Annual license for collection of mushrooms and non-medicinal plants and others.

Interviews:

- Provide information if the staff and the *workers** are acquainted.

Criterion 6.7. *The Organization** shall *protect** or *restore** natural *watercourses, water bodies**, *riparian zones** and their *connectivity*. The Organization** shall avoid negative impacts on water quality and quantity and mitigate and remedy those that occur. (C6.5 and 10.2 P&C V4)

Indicator 6.7.1.* Natural watercourses and all *water bodies** are identified and mapped.

Verifiers:

Documentary check:

- Forest maps.

Field check:

- Check to what extend the situation on the ground corresponds to the information in the *planning documentation**.

Indicator 6.7.2.* Measures are implemented to protect watercourses, *water bodies**, *riparian zones** and their ecological *connectivity*,* during the design, construction and maintenance of forest roads and skidding routes.

Measures include but are not limited to:

1. The number of stream crossings is minimized.
2. Stream crossings are planned before operations begin and are shown on relevant maps.
3. Where a watercourse has to be crossed, protective facilities are to be constructed (e.g. bridges, wooden trays, stone bottom, etc.) or culverts are to be placed.
4. Stream crossings are perpendicular to the stream.
5. New roads are not constructed in *streambeds**.
6. Existing roads in *streambeds** are closed and replacements are constructed.
7. Valley bottom roads and skidding routes are kept as far back from the stream as possible.
8. Culverts are designed so they do not obstruct the migration of fish, create fast water velocities or *riverbeds** unsuitable for fish.

9. Drains do not drain into natural watercourses. Where this is unavoidable, silt traps are installed and cleaned regularly.

Verifiers:

Documentary check:

- Projects for construction of forest roads;
- Technological plans for logging.

Field check:

- Check on site the emplacement of the forest roads and skidding routes;
- Presence of traces of sediments or other damages to water sources;
- Method of crossing the water courses;
- Presence of and method of placement of protective facilities.

Interviews:

- Provide information if the staff and the *workers** are acquainted with the requirements of planning/designing, construction and maintenance of forest roads and skidding routes, and the measures for *protection** of the water courses.

Indicator 6.7.3.* Measures are applied to protect watercourses, *water bodies**, *riparian zones** and their ecological *connectivity** during forest management operations.

Measures include but are not limited to:

1. Harvesting machinery must not enter streams except at designated and designed stream crossings
2. There shall be no hauling of timber and vehicle traffic along watercourses or *streambeds**. In cases where no other technological option exists, this is allowed upon the approval of the Head of the *Organization** after construction of a pit at the end of the road. The pit serves to trap the soil particles and is cleaned periodically.
3. Logging residues (branches, tops, etc.) are not stored in or adjacent to permanent and non-permanent watercourses and *water bodies**. Harvesting residues caught up in watercourses or *riberbeds** are *promptly** removed.
4. Barriers to watercourses, streams and fish ladders are not created.
5. Temporary wood stores are not built in or over permanent water courses.

Verifiers:

Documentary check:

- Technological plans for logging
- Check to what extend the measures form the *Planning documentation** correspond to the Programme of measures of the Water Basin Management Plan aimed at achieving a good condition - in terms of quality and quantity - of the surface and ground*water bodies**

Field check:

- Check the implementation of the measures for *protection** of water courses, *water bodies**, riparian areas and their ecological *connectivity**

Interviews:

- Staff/*workers** (incl. subcontractors) engaged with forest *management activities** on site are acquainted with the measures for *protection** of water courses, *water bodies**, *riparian zones** and

their ecological *connectivity**.

Indicator 6.7.4*. For the *protection** of watercourses, *water bodies**, *riparian zones** and their ecological *connectivity** along all permanent watercourses and *water bodies** buffer zones with a width of not less than 15 m. are established, where:

1. Harvesting does not take place or has a limited intensity of up to 5% of the buffer zone standing volume.
2. Harvesting in the buffer zone does not create open spaces with a diameter bigger than 10 meters.
3. Dead and dying trees in the buffer zone are removed only if they endanger the lives and health of people or create conditions which impede water flow.
4. In the 100-meter edging of the rivers Maritsa, Tundzha, Mesta, Struma, Arda, Lom, Tsibritsa, Ogosta, Skyt, Iskar, Yantra, Vit, Sazliika, Stryama, Osam, Rusenski Lom, Kamchia, Veleka and Rezovska and 50 meter for all the rest watercourses in the lower hilly plain belt and the foothill belt of oak forests, regeneration felling is carried out with an extended regeneration period except in artificially established stands.

Verifiers:

Documentary check:

- Buffer zones are reflected in technological plans for logging and other relevant documentation.

Field check:

- The regimes for *protection** of buffer zones are implemented.

Interviews:

- Staff involved in the forest *management activities** (incl. subcontractors) is aware of the buffer zone regimes.

Indicator 6.7.5.* Natural watercourses, *water bodies**, *riparian zones** and their ecological *connectivity**, water quantity and water quality that have been damaged by activities of the *Organization** (including activities in the past) are *restored**.

Verifiers:

Documentary check:

- Natural watercourses, *water bodies**, *and riparian zones**, damaged by the *Organization*'s* activities are identified, including negative impacts on the quality and quantity of water.
- *Restoration** measures are specified in the *planning documentation**.
- Check to what extend the measures in the *planning documentation** correspond to the Program of measures of the River Basin Management Plans, aimed at reaching good qualitative and quantitative status of surface and underground *water bodies**
- Protocols of checks of the Regional Inspectorates for Environment and Water (RIEWs) and Basin Directorates (BDs).

Field check:

- Presence of damaged natural watercourses, *water bodies**, *riparian zones** and their ecological *connectivity**; negative effects on the quality and quantity of water.
- Implementation of the *restoration** measures that were planned.

Interviews:

- Provides information on whether staff and *workers** are familiar with the requirements.
- Interviews with *stakeholders* * (Regional Inspectorates for Environment and Water, Basin Directorates and others.).

Indicator 6.7.6.* Where continued degradation exists to watercourses, *water bodies**, water quantity and water quality caused by activities of the *Organization** (including activities in the past), measures are implemented that mitigate the negative impacts and stop degradation.

Verifiers:

Documentary check:

- Natural watercourses, *water bodies** and riparian areas with continuous degradation are identified.
- *Restoration** measures are specified in the *planning documentation**.
- Check to what extend the measures in the *planning documentation** of the *Organizatio*n* correspond to the measures stipulated in the River Basin Management Plans (the plans of Basin Directorates) aimed at reaching good qualitative and quantitative status of surface and underground *water bodies**.

Field check:

- Check for damages on natural watercourses, *water bodies** and riparian areas as well as for negative effects on the quality and quantity of water;
- Implementation of the planned *restoration** measures.

Interviews:

- Provides information if the staff and *workers** are familiar with the requirements.
- Interviews with *stakeholders* * (Regional Inspectorates for Environment and Water, Basin Directorates and others).

Indicator 6.7.7* Where continued degradation exists to watercourses*, *water bodies**, water quantity and water quality caused by the activities of third parties, the *Organization** informs the responsible authorities and assists in the implementation of measures for mitigation of the negative impacts and cessation of degradation.

Verifiers:

Documentary check:

- Correspondence, agreements and other documentation showing that the *Organization** has informed the relevant responsible authorities.

Interviews with:

- Responsible authorities.

Criterion 6.8.*The Organization** shall manage the *landscape** in the *Management Unit** to maintain and/or *restore** a varying mosaic of species, sizes, ages, spatial scales and regeneration cycles appropriate for the *landscape values** in that region, and for enhancing environmental and economic *resilience**. (C10.2 and 10.3 P&C V4)

Indicator 6.8.1*. A varying mosaic of species, sizes, ages, spatial scales, and regeneration cycles is maintained appropriate to *natural forest** types at a *landscape** level.

Verifiers:

Documentary check:

- *Planning documentation** – forest inventory data and maps;

Field check:

- Check to what extend the identified elements are preserved;
- Check to what extend forest management operations maintain and/or *restore** the diversity of the elements mentioned in the criteria.

Interviews:

- Check if the relevant staff of the *Organization** is familiar with this requirement.

Indicator 6.8.2. Where the characteristics of the forest differ significantly from its natural structure or does not have natural levels of diversity, measures and actions to improve and *restore** diversity are undertaken appropriate to the *landscape**.

Verifiers:

Documentary check:

- Assessment to what extend the planned activities maintain or lead to *restoration** of the natural diversity.

Field check:

- Implementation of the measures on the field.

Interviews:

- Check if the relevant staff of the *Organization** is familiar with this requirement.

Criterion 6.9. The *Organization** shall not convert *natural forest** to *plantations**, nor *natural forests** or *plantations** on sites directly converted from *natural forest** to non-forest land use, except when the conversion:

a) Affects a *very limited portion** of the area of the *Management Unit**, and

b) Will produce clear, substantial, additional, secure long-term *conservation** benefits in the *Management Unit**, and

c) Does not damage or threaten *High Conservation Values**, nor any sites or resources necessary to maintain or enhance those *High Conservation Values**. (C6.10 P&C V4 and Motion 2014#7)

Indicator 6.9.1.* There is no conversion of *natural forest** to *plantations**, nor conversion of natural *forests** to non-forest land use, nor conversion of *plantations** on sites directly converted from n*atural forest** to non-forest land use, except in the following cases:

1. When:

a) The affected area is not larger than 0,5 % of the total *FMU** at the time of certification. If at any time the area included within the scope of the certificate is reduced, the affected area is not larger than 0.5% of the total *FMU** at the time of conversion;

and

b) The conversion will produce clear, substantial, additional, secure, long-term conservation benefits in the *FMU**;

and

c) The conversion does not damage or threaten *High Conservation Values**, nor any sites or resources necessary to maintain or enhance those *High Conservation Values**.

2. The conversion is related to the construction of infrastructure of national importance, as well as sites

related to national security and defense.

Verifiers:

Documentary check:

- Check the areas related to the conversion and / or change of use.

Field check:

- Verification of compliance of registered conversions and / or change of use to the real situation on the field.

Indicator 6.9.2* There is no conversion of *natural forest** to *forest cultures**, nor conversions of *forest cultures** to *plantations**, except in the following cases:

1. When:

a) The affected area is not larger than 0,5 % of the total *FMU** at the time of certification. If at any time the area included within the scope of the certificate is reduced, the affected area is not larger than 0.5% of the total *FMU** at the time of conversion;

and

b) The conversion will produce clear, substantial, additional, secure, long-term conservation benefits in the *FMU*;*

and

c) The conversion does not damage or threaten *High Conservation Values*,* nor any sites or resources necessary to maintain or enhance those *High Conservation Values*.*

2. When the conversion was necessary in order to *restore** *large-scale natural disturbance**.

Verifiers:

Documentary check-up:

- Check the areas related to the conversion and / or change of use.

Field check-up:

- Verification of compliance of registered conversions and / or change of use to the real situation on the field.

Criterion 6.10. Management Units containing plantations that were established on areas converted from natural forest after November 1994 shall not qualify for certification, except where:

a)Clear and sufficient evidence is provided that The Organization was not directly or indirectly responsible for the conversion, or

b) The conversion affected a very limited portion of the area of the Management Unit and is producing clear, substantial, additional, secure long-term conservation benefits in the Management Unit. (C10.9 P&C V4)

Indicator 6.10.1.* Based on Best Available Information*, accurate data is compiled on all conversions since 1994

Verifiers:

Documentary check:

-Check for the presence of relevant information / documentation about con-versions made.

-Register of forest plantations* and forest cultures*established after 1994.

Indicator 6.10.2.* Areas converted from *natural forest** to *plantations*or to forest cultures** since November 1994 are not certified, except where:

1) The *Organization** provides clear and sufficient evidence that it was not directly or indirectly responsible for the conversion;
2) The conversion is producing clear, substantial, additional, secure, long-term *conservation** benefits in the *Management Unit**; and
3) The total area of *plantations**and *forest cultures**on sites converted from *natural forest** since November 1994 is less than 5% of the total area of the *Management Unit**.

Verifiers:

Documentary check:

- Check for the presence and do assessment of the relevance of collected evidences about conversions for which the present manager / owner is not responsible directly or indirectly.
- Analysis of the benefits of planned transformations;
- Existence of a register of conversions after 1994.

Field check:

- Check for compliance of the registered conversions to the realities on the ground

Interviews:

The relevant staff within the *Organization** is aware about the requirements.

PRINCIPLE 7: MANAGEMENT PLANNING

*The Organization** shall have a *management plan** consistent with its policies and *objectives** and proportionate to *scale, intensity and risks** of its *management activities**. The *management plan** shall be implemented and kept up to date based on monitoring information in order to promote *adaptive management**. The associated planning and procedural documentation shall be sufficient to guide staff, inform *affected stakeholders** and *interested stakeholders** and to justify management decisions. (P7 P&CV4)

Criterion 7.1. *The Organization** shall, proportionate to *scale*, *intensity* and *risk** of its *management activities**, set policies (visions and values) and objectives for management, which are environmentally sound, socially beneficial and economically viable. Summaries of these policies and *objectives** shall be incorporated into the *management plan**, and *publicized**. (C7.1a P&C V4)

Indicator 7.1.1.* The *Organization** has written policies (vision and values) for the management of its forest territories and these policies are in compliance with the requirements of this standard.

Verifiers:

Documentary check:

- Management plan.

Interviews:

- Interviews with the *interested stakeholders** regarding the extent to which the policies of the *Organization** contribute for the fulfilment of the requirements of the Standard.

Indicator 7.1.2.* Specific, operational *management objectives** that address the requirements of this standard are defined and documented.

Verifiers:

Documentary check:

- Management plan. The auditor checks if in the management plan are included specific *management objectives** that lead to fulfilment of the requirements of the Standard.

Indicator 7.1.3.* A summary of the defined policies (vision and values) and of the specific *management*

*objectives** is included in the *management plan** and *publicized**.

Note for *SLIMF:** *SLIMF* Organizations** are not obliged to publicize the summary according to 7.1.3. Still, the *SLIMF* Organizations** are obliged provide the summary if requested.

Verifiers:

Documentary check:

- The auditor checks if there is a summary available and if it is *publicized**.

Criterion 7.2. *The Organization** shall have and implement a *management plan** for the *Management Unit** which is fully consistent with the policies and *management objectives** as established according to *Criterion** 7.1. *The management plan** shall describe the natural resources that exist in the *Management Unit** and explain how the plan will meet the FSC certification requirements. The *management plan** shall cover forest management planning and social management planning proportionate to *scale**, *intensity** and *risk** of the planned activities. (C7.1 P&C V4)

Indicator 7.2.1.* The *management plan** includes management actions, *procedures**, strategies and other measures to achieve the *management objectives** (defined according to 7.1.2).

Verifiers:

Documentary check:

General check-up of the management plan*. The auditor checks if the *management plan** includes *procedures**, strategies and other measures for achieving the *management objectives** defined according to 7.1.2.

Indicator 7.2.2.* The *management plan** includes an assessment of the natural resources and *environmental values** within the *Management Unit** including:

- Description of the physical and geographical characteristics of the *Management Unit** (topography, soil, geological characteristics, water resources, etc.);
- Description of the timber resource (inventory);
- Description of the non-timber resources (and/or inventory where a methodology exists);
- *Protection areas and zones**;
- Current and potential presence of *rare**, *threatened** and endangered species and their *habitats** (required according to 6.4.1 and 6.5.1);
- *High conservation values**.

Verifiers:

Documentary check:

- Check if the listed elements are present in the *Management plan**

Indicator 7.2.3. The *management plan** includes an assessment of the social, economic and cultural resources and conditions in accordance with Principles 2-6 and Principle 9.

Verifiers:

Documentary check:

- Check if the listed elements are present in the *management plan**

Indicator 7.2.4.* The *management plan** includes an assessment of the main social and environmental risks within the *Management Unit** in accordance with Principles 2-6 and Principle 9.

Verifiers:

Documentary check:

- Check if the listed elements are present in the *Management plan**

Indicator 7.2.5.* When the *Organization** makes promotional claims regarding the maintenance and/or enhancement of *ecosystem services** (see 5.1.4) *the management plan** includes an assessment of the promoted *ecosystem services**.

Verifiers:

Documentary check:

- Check if the listed elements are present in the *management plan**.

Indicator 7.2.6.* The *management plan** includes programmes and activities to guarantee *workers** rights, occupational health and safety and *gender equality** in accordance with Principle 2.

Verifiers:

Documentary check:

- Developed programmes and *procedures** to guarantee the *workers** rights, healthy and safe working conditions and *gender equality**.

Indicator 7.2.7. The *management plan** includes programmes and activities regarding community relations (including resolution of disputes) and the social and economic development of *local communities** in accordance with Principles 1, 4, 5 and 7.

Verifiers:

Documentary check:

- Availability of impact assessment;
- Developed programmes and procedures for arrangement of the community relations and support for the local social and economic development.

Indicator 7.2.8.* The *management plan** provides information on and justifications for the planned forestry *management activities**, the silvicultural systems used, harvesting methods and the necessary equipment in accordance with Principle 10.

Verifiers:

Documentary check:

- Check-up if the required elements are present in the *Management plan**.

Indicator 7.2.9.* The *management plan** includes rationale for harvesting rates of timber and tree species and other natural resources in accordance with Principle 5.

Verifiers:

Documentary check:

- Rationale for harvesting rates of timber and tree species and other natural resources is available.

Indicator 7.2.10.* The *management plan** includes programmes and activities regarding the identification, *protection** and / or *restoration** of:

- *Rare** and endangered* species and their *habitats**;
- *Water bodies** and *riparian zones**;
- *Landscape** connectivity*, including wildlife corridors;
- *Ecosystem services** for which the Organization makes promotional claims in accordance with Criterion 5.1 and Annex 6;
- *Representative samples** of all natural *ecosystems** in accordance with Principle 6;

- *High conservation values** in accordance with Principle 9.

Verifiers:

Documentary check:

- Available report for the *high conservation values*.*
- *Procedures** for identification and protection of *rare** and endangered species, their *habitats** and *biodiversity** elements.
- *Procedures** for protection of *water bodies** and *riparian zones**.
- *Procedures** to guarantee the *landscape connectivity**.

Indicator 7.2.11.* The *management plan** includes *procedures** for assessment of the impacts from forest *management activities** and measures for prevention and mitigation of the identified negative impacts on:

- The *environmental values** defined in accordance with Principles 6 and 9;
- The social values identified in accordance with Principles 2-4 and Principle 9;
- The *ecosystem services** for which the *Organization** makes promotional claims in accordance with Criterion 5.1 and Annex 6.

Verifiers:

Documentary check:

- Available report for the *high conservation values**.
- *Procedures** for identification and *protection** of *rare** and endangered species, their *habitats** and elements of the *biodiversity**.
- *Procedures** for *protection** of *water bodies** and riparian zones.
- *Procedures** for assessment, prevention and mitigation of the identified negative impacts from forest *management activities** over the ecological and social values.

Indicator 7.2.12. The *management plan** includes a description of the monitoring programmes including monitoring for:

- Growth and yield in accordance with Principle 5;
- *Ecosystem services** for which the *Organization** makes promotional claims, in accordance with Criterion 5.1 and Annex 6;
- *Environmental values** defined in accordance with Principles 6 and 9;
- Impacts from forest *management activities** defined in accordance with Principle 10;
- The *high conservation values** identified in accordance with Principle 9;
- The *engagement** of *interested stakeholders** in accordance with Principles 2-5 and Principle 9.

Verifiers:

Documentary check:

- Available report for the *high conservation values**.
- Procedures for monitoring of the described elements.

Indicator 7.2.13.* The *management plan** includes maps (on paper and in electronic format) of the natural resources, *protection areas and zones**, planned activities and ownership of the *Management Unit**

Verifiers:

Documentary check: - Availability of maps.
Criterion 7.3. *The management plan** shall include *verifiable targets** by which progress towards each of the prescribed *management objectives** can be assessed. (new)
Indicator 7.3.1.* The *management plan** defines *verifiable targets** for the achievement of the *management objectives** related to the yield of products from the forest. Verifiers: *Documentary check:* - Availability of *verifiable targets** related to the yield of forest products. *Interviews with:* - Responsible personnel of the *Organization**.
Indicator 7.3.2.* The *management plan** defines *verifiable targets** for achievement of the *management objectives** related to regeneration and forest cover. Verifiers: *Documentary check:* - Availability of *verifiable targets** related to regeneration and forest cover. *Interviews with:* - Responsible personnel of the *Organization**.
Indicator 7.3.3.* The *Management plan** defines *verifiable targets** for achievement of the *management objectives** related to *protection** of *water bodies**. Verifiers: *Documentary check:* - Availability of *verifiable targets** related to *protection** of *water bodies** *Interviews with:* - Responsible personnel of the *Organization**.
Indicator 7.3.4. The *management plan** defines *verifiable targets** for achievement of the *management objectives** related to soil erosion and compaction. Verifiers: *Documentary check:* - Availability of *verifiable targets** related to soil erosion and compaction. *Interviews with:* - Responsible personnel of the *Organization**.
Indicator 7.3.5.* The *management plan** defines *verifiable targets** for achievement of the *management objectives** related to populations of wild flora and fauna, *biodiversity** and the condition of the identified *high conservation values**. Verifiers: *Documentary check:* - Availability of *verifiable targets** related to populations of wild flora and fauna, *biodiversity** and the status of the identified *high conservation values**.

Interviews with:

- Responsible personnel of the *Organization** and experts

Indicator 7.3.6. The *management plan** defines *verifiable targets** for achievement of the *management objectives** related to services provided to *local communities**.

Verifiers:

Documentary check:

- Availability of *verifiable targets** related to the services provided to the *local communities**.

Interviews with:

- Responsible personnel of the *Organization** and *local communities**

Indicator 7.3.7.* The *management plan** defines *verifiable targets** for achievement of the *management objectives** related to work safety.

Verifiers:

Documentary check:

- Availability of *verifiable targets** related to work safety
- Documentary check-up to determine if the number of work accidents is being stable or diminishing / improvement of the working conditions

Indicator 7.3.8. The *management plan** defines *verifiable targets** for achievement of the *management objectives** related to *economic viability** of the *Organization**.

Verifiers:

Documentary check:

- Availability of *verifiable targets** related to the *economic viability** of the *Organization** (the targeted financial objectives).

Criterion 7.4. *The Organization** shall update and revise periodically the management planning and procedural documentation to incorporate the results of monitoring and evaluation, stakeholder *engagement** or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances. (C7.2 P&C V4)

Indicator 7.4.1.* *The management plan** is revised and updated taking into account the results of the periodic monitoring carried out in accordance with Criterion 8.2.

Verifiers:

Documentary check:

- Check if the *management plan** is up-to-date.
- Check if the results of the periodical monitoring have been integrated in the updated *management plan**.

Indicator 7.4.2.* *The management plan** is revised and updated periodically to incorporate the results of external inspections and assessments, as well as certification audits.

Verifiers:

Documentary check:

- Check if the *management plan** is up-to-date.
- Check if the results of the outer inspections and assessments, as well as certification audits have

been integrated in the updated *management plan**.

Interviews with:

- Responsible personnel of the *Organization**.

Indicator 7.4.3.* *The management plan** is revised and updated periodically to incorporate the results of stakeholder *engagement**.

Verifiers:

Documentary check:

- Check if in the *management plan** have been integrated applicable results from the consultations with *interested stakeholders**.

Interviews with:

- *interested stakeholders**.

Indicator 7.4.4.* *The management plan** is revised and updated periodically to incorporate new scientific and technical information.

Verifiers:

Documentary check:

- Check if in the *management plan** have been integrated applicable new technical and scientific information.

Indicator 7.4.5.* *The management plan** is revised and updated periodically consistent with the changing environmental, social and economic circumstances.

Verifiers:

Documentary check:

- Check if in the *management plan** have been integrated applicable results from assessments and analyses of the changing environmental, social and economic circumstances.

Criterion 7.5. The *Organization** shall make *publicly available** a summary of the *management plan** free of charge. Excluding *confidential information**, other relevant components of the *management plan** shall be made available to *affected stakeholders** on request, and at cost of reproduction and handling. (C7.4 P&C V4)

Indicator 7.5.1. A summary of the *management plan** (including overview / thematic maps) excluding *confidential information** is made *publicly available** at no cost.

Verifiers:

Documentary check:

- Availability and accessibility of the summary of the *management plan**.

Interviews with:

- With *interested stakeholders**.

Indicator 7.5.2.* Relevant components of the *management plan**, excluding *confidential information**, are available to *affected stakeholders** on request at the actual costs of reproduction and handling.

Verifiers:

Documentary check:

- Availability of a *procedure** for providing the *management plan** (excluding *confidential information**)

on request.

Interviews:

- With *interested and affected stakeholders*.*

Criterion 7.6. The *Organization** shall, proportionate to *scale, intensity and risk** of *management activities**, proactively and transparently engage *affected stakeholders** in its management planning and monitoring processes, and shall engage *interested stakeholders** on request. (C4.4 P&C V4)

Indicator 7.6.1.* The *Organization** implements mechanisms for *engagement** of *affected stakeholders** in the process of the 10 year planning of forest *management activities**, taking into account their interests as well as other *interested stakeholders** on request.

Note for *SLIMF*:* For *SLIMF* Organizations** the indicator requires the following: The *Organization** informs the *affected and interested stakeholders** of the possibility to participate in the planning of the forest *management activities** according to their interests.

Verifiers:

Documentary check:

- Availability of relevant mechanisms and how they are applied.

Interviews with:

- Affected and *interested stakeholders**.

Indicator 7.6.2.* In the process of annual planning of forest *management activities*,* mechanisms are applied for informing and consulting *affected stakeholders** as well as other *interested stakeholders** on request.

Note for *SLIMF*:* For *SLIMF* Organizations** the indicator requires the following: The *Organization** informs the *affected and interested stakeholders** of the possibility to participate in the planning of the forest *management activities** according to their interests.

Verifiers:

Documentary check:

- Availability of relevant mechanisms and how they are applied.

Interviews with:

- Affected and *interested stakeholders**.

Indicator 7.6.3.* *Procedures** are applied to guarantee that the *Organization** undertakes activities for engagement* of the *affected stakeholders** in the process of planning of forest *management activities** including:

- identification of rights (Criterion.4.1),
- identification of sites (Criterion 4.7),
- identification of impacts (Criterion 4.5),
- processes to support of the social and economic development of the *local communities** (Criterion 4.4),
- dispute resolution processes (Criterion 1.6 and 2.6) and
- collective bargaining at the level of the *Organization** (Criterion 2.4) .

The procedures for engagement are consistent with the cultural characteristics of the *affected stakeholders**.

Verifiers:

Documentary check:

- Availability of relevant *procedures** and how they are applied.

Interviews with:

- A*ffected stakeholders**.

Indicator 7.6.4.* Procedures are applied that guarantee that the *Organization** undertakes activities to engage affected and *interested stakeholders** in the assessment, management and monitoring of *high conservation values**.

Note for *SLIMF:** The requirement of the indicator for *SLIMF** *Organizations** is the following: The *Organization** has undertaken activities for *engagement** of *affected and interested stakeholders** in the assessment, management and monitoring of *HCV*.*

Verifiers:

Documentary check:

- Availability of relevant *procedures** and how they are applied.

Interviews with:

- Affected and *interested stakeholders**.

Indicator 7.6.5. The *procedures** for *engagement** of the affected and *interested stakeholders** describe how:

- the appropriate representatives and contact points (including if applicable local institutions, organizations and authorities) are identified;
- appropriate communication channels that allow information to flow freely in both directions are established and used;
- the equal *engagement** of all present interested groups (including women, youths, elderlies, minorities) is guaranteed;
- all meetings, questions discussed and agreements reached are recorded;
- the approval of records of meetings by the participants is guaranteed;
- the *interested stakeholders** engaged in the consultation process will be informed of the results and how those results and their stipulated application will be approved before the forest *management activities*** continue.

Verifiers:

Documentary check:

- Check up for availability of relevant *procedures** and how they are applied.
- Check up for conformity of the *procedures** with the requirements of 7.6.5.

Interviews with:

- Affected and *interested stakeholders**.

Indicator 7.6.6.* The *affected stakeholders** are informed in advance of the planning and monitoring processes that may have negative impacts on them and their interests and they are provided with opportunity to participate in these processes.

Verifiers:

Documentary check:

- Availability of written documentation (protocols, minutes, etc.) proving that the *affected stakeholders** were informed in advance for the planning and monitoring processes and they were provided with opportunity to participate in these processes.

Interviews with:

- *Affected stakeholders**

Indicator 7.6.7.* On request *interested stakeholders** are provided with opportunity to participate in the monitoring of the forest *management activities** affecting their interests.

Verifiers:

Documentary check:

- Availability of written documentation (protocols, minutes, etc.) proving that the *interested stakeholders** were given the opportunity to participate in the monitoring of the forest *management activities** on their request.

Interviews with:

- *Interested stakeholders*.*

PRINCIPLE 8: MONITORING AND ASSESSMENT

The *Organization** shall demonstrate that, progress towards achieving the *management objectives**, the impacts of *management activities** and the condition of the Management Unit*, are monitored and evaluated proportionate to the *scale, intensity and risk** of management activities, in order to implement *adaptive management**. (P8 P&C V4)

Criterion 8.1. The *Organization** shall monitor the implementation of its *Management Plan**, including its policies and *management objectives*,* its progress with the activities planned, and the achievement of its *verifiable targets**. (new)

Indicator 8.1.1.* A system for annual monitoring of the implementation of the *management plan**, including the policies, *management objectives** and *verifiable targets*,* is available and applied.

Verifiers:

Documentary check:

- Check up for the availability of a system (an order of the Director of the *Organization**) and/or written plan/method for monitoring that includes all the elements mentioned in the indicator.

Interviews:

- With the responsible personnel of the *Organization** regarding their knowledge on the system for monitoring and their responsibilities related to the system.

Criterion 8.2. The *Organization** shall monitor and evaluate the environmental and social impacts of the activities carried out in the *Management Unit**, and changes in its environmental condition. (C8.2 P&C V4)

Indicator 8.2.1.* The social impacts of *management activities** are monitored consistent with Annex 7.

Verifiers:

Documentary check:

- Availability of a documented system for monitoring.
- Availability of written notes from implemented monitoring – check for lists, analyses, summaries.

Interviews:

- With the personnel responsible for the monitoring and *local communities**.

Indicator 8.2.2.* The environmental impacts of *management activities** are monitored consistent with Annex 7.

Verifiers:

Documentary check:

- Availability of a documented system for monitoring.
- Availability of written notes from implemented monitoring – check for lists, analyses, summaries.

Interviews:

- With the responsible personnel regarding their knowledge on the method for monitoring and their relevant responsibilities.

Indicator 8.2.3.* Changes in environmental conditions are monitored consistent with Annex 7.

Verifiers:

Documentary check:

- Availability of a documented system for monitoring.
- Availability of written notes from implemented monitoring – check for lists, analyses, summaries.

Interviews:

- With the employees *d*oing the field inspections –chief of district, assistant forester, etc.
- With the responsible personnel regarding their knowledge on the monitoring methods and their relevant responsibilities.

Criterion 8.3 The *Organization** shall analyze the results of monitoring and evaluation and feed the outcomes of this analysis back into the planning process. (C8.4 P&C V4)

Indicator 8.3.1.* The *Organization** adapts the forest *management activities** according to the analysis of the monitoring results.

Verifiers:

Documentary check:

- Management plan;
- Documents related to preparation, planning and implementation of the forest *management activities** – tree marking documents, technological plans, plans statements.
- Evidences that the risks, changes or deviations, identified during the monitoring have been included in the forest management planning process.
- Availability of documents with analysis of the monitoring results.

Interviews:

- Provide information if the responsible personnel is informed how the monitoring results are being included in the annual planning and implementation of the forestry activities.

Indicator 8.3.2.* If monitoring results show non-conformities with the *FSC Standard** then *management objectives**, *verifiable targets** as well as *management activities** are revised.

Verifiers:

Documentary check:

- Management plan

- Availability of documents with analysis of the monitoring results.

Field check

Interviews:

- With management and personnel of the *Organization**.

Criterion 8.4. The *Organization** shall make *publicly available** a summary of the results of monitoring free of charge, excluding *confidential information**. (C8.5 P&C V4)

Indicator 8.4.1*. A summary of the monitoring results excluding *confidential information** is made *publicly available**, and is provided freely and at no cost.

Verifiers:

Documentary check:

- Availability of *publicly available** summary – on the information board, website of the *Organization**, etc.

Interviews with:

- With representatives of the *local communities**

Criterion 8.5. The *Organization** shall have and implement a tracking and tracing system proportionate to *scale, intensity and risk** of its *management activities**, for demonstrating the source and volume in proportion to projected output for each year, of all products from the *Management Unit** that are marketed as *FSC certified**. (C8.3 P&C V4)

Indicator 8.5.1.* A system is implemented to track and trace all products from the certified forest that are marketed as *FSC certified**.

Verifiers:

Documentary check:

- Check up for available *procedure** according to the indicator – an order, system, plan for tracing of the products.

Interviews:

- With the personnel regarding their knowledge of the system and their relevant responsibilities.

Indicator 8.5.2.* Information about all *products* sold as *FSC certified** is documented and kept, including:

1. Common and scientific species name;
2. Product name or description;
3. Volume (or quantity) of product;
4. Information to trace the material to the source of origin logging block;
5. Logging or production date;
6. If basic processing activities take place in the forest, the date and volume produced;

Verifiers:

Documentary check:

- Accounting documentation – invoices, waybills, transport tickets, sale contracts.
- Files of the logged sites – tree marking documents, wood assortment lists, handing over protocols.

Indicator 8.5.3.* Sales invoices for *FSC certified** products and the accompanying documentation are kept for a minimum of five years. The documents identify at a minimum, the following information:

1. Name and address of purchaser;
2. The date of sale;
3. Common species name;
4. Product description;
5. The volume (or quantity) sold;
6. Certificate code;
7. The FSC Claim "FSC 100%" identifying *products* sold as *FSC certified**.

Verifiers:

Documentary check:

- Accounting documentation – invoices, waybills, transport tickets, sale contracts.
- Files of the logged sites – tree marking documents, wood assortment lists, handing over protocols.

PRINCIPLE 9: HIGH CONSERVATION VALUES

The *Organization** shall maintain and / or enhance the *High Conservation Values** in the Management Unit* through applying the *precautionary approach**. (P9 P&C V4)

Criterion 9.1. The *Organization**, through engagement* with *affected stakeholders**, *interested stakeholders** and other means and sources, shall assess and record the presence and status of the following *High Conservation Values** in the *Management Unit**, proportionate to the *scale, intensity and risk** of impacts of *management activities**, and likelihood of the occurrence of the *High Conservation Values**:

HCV 1 – Species diversity. Concentrations of biological diversity including endemic species, and *rare*, threatened* or endangered species*,* that are significant at global, regional or national levels.

HCV 2 – Landscape-level ecosystems and mosaics. *Intact forest landscapes** and large landscape-level *ecosystems** and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

HCV 3 – *Ecosystems** and *habitats**. Rare, threatened, or endangered ecosystems, habitats or refugia.

HCV 4 – Critical *ecosystem services*.* Basic *ecosystem services** in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

HCV 5 – Community needs. Sites and resources fundamental for satisfying the basic necessities of *local communities** or *Indigenous Peoples** (for livelihoods, health, nutrition, water, etc.), identified through *engagement** with these communities or *Indigenous Peoples**.

HCV 6 – Cultural values. Sites, resources, *habitats** and *landscapes** of global or national cultural, archaeological or historical significance, and / or of critical cultural, ecological, economic or religious / sacred importance for the traditional cultures of local communities or *Indigenous Peoples**, identified through *engagement** with these *local communities** or *Indigenous Peoples**. (C9.1 P&C V4 and Motion 2014#7)

Indicator 9.1.1.* Within the *Management Unit*, a* specialized research has been carried out to assess the presence and condition of *high conservation values** in compliance with the *Practical Guide for Identifying, Managing, and Monitoring of High Conservation Value Forests in Bulgaria*.* (See Annex 13)

Verifiers:

Documentary check:

- Availability of a documented research on the *HCV** forests / *HCVF** report

Field check:

- Check of the identified *HCV** forests for conformity of the documented information with the situation on the field.

Interviews:

- Provide information whether the personnel is acquainted with the *HCV** research.

Indicator 9.1.2.* The results of the research according to 9.1.1 are presented in a report and the identified *HCV** forests are mapped.

Verifiers:

Documentary check:

- *HCVF** report
- Maps with the identified *HCV** forests

Interviews:

- Provide information whether the personnel is acquainted with the presence of *HCV**.

Indicator 9.1.3.* During the research carried out according to 9.1.1, consultations with *affected** and *interested stakeholders** and experts who are versed in the *HCV** categories have been held and documented. The mechanisms for consultation are in accordance with the cultural characteristics of the participants.

Verifiers:

Documentary check:

- Lists of the experts and *interested stakeholders** who were consulted and took part in the development of the *HCVF** report.
- Letters to the *interested stakeholders**
- Documentation from public discussions, opinions, statements, etc.

Interviews:

- Provide information whether the local *interested stakeholders** are acquainted with the presence of *HCV** forests in the region and how they have been consulted or engaged in identification of the *HCV** forests.

Indicator 9.1.4.* The report according to 9.1.2 is *publicly available** on the website of the Organization and the public version excludes information about localities of *rare** and *threatened** species. In case, the *Organization** does not have a website, the report is available on request.

Verifiers:

Documentary check:

- Website of the Organization
- Correspondence with stakeholders who have requested the report

Indicator 9.1.5.* The report according to Indicator 9.1.2 is updated when new information becomes available, after justification and consultation with the *interested stakeholders**. Change of the already identified *old-growth forests** is not allowed except in the cases of *large-scale natural disturbances**. (see the Note at Indicator 6.5.4)

Verifiers:

Documentary check:

- *HCV** Report
- Letters from interested stakeholders
- Justifications
- Documents proving public consultations were held.

Interviews with:

- Interested stakeholders and staff of the *Organization**

Indicator 9.1.6. *Affected and interested stakeholders** are informed that they can submit new information to the *Organization** to update the report according to 9.1.2.

Verifiers:

Documentary check:

- Letters to interested stakeholders
- List of participants and minutes from meetings with *interested and affected stakeholders*.*

Interviews with:

- *Interested and affected stakeholders** and personnel of the *Organization**.

Criterion 9.2.The *Organization** shall develop effective strategies that maintain and/or enhance the identified *High Conservation Values**, through *engagement** with *affected stakeholders**, *interested stakeholders** and experts. (C9.2 P&C V4)

Indicator 9.2.1.* *Threats** to the identified *High Conservation Values** are identified and documented.

Note: The *threats** are identified according to the *Practical Guide for Identifying, Managing, and Monitoring of High Conservation Value Forests in Bulgaria**.

Verifiers:

Documentary check:

- *HCVF** report with identified threats for the *HCV**.

Field check:

- Check if the threats for *HCV** are correctly identified.

Interviews:

- Provides information of the personnel is acquainted with the presence of *HCVF** and the threats for the identified *HCV**.

Indicator 9.2.2.* The *management plan** includes specific actions (measures) to maintain and/or enhance the identified *High Conservation Values** that are applied prior to and during the commencement of forest *management activities**.

Verifiers:

Documentary check:

- Availability of specific actions (measures) for maintenance and enhancement the identified *HCV** in the *HCVF** report.
- Files of the sites with implemented *management activities**.

Field check:

- Check if the stipulated specific actions for maintenance and enhancement of the *HCV** are

considered and applied prior to and during the *management activities**.

Interviews:

- Provide information if the personnel is acquainted with the presence of *HCV** and with the measures that were stipulated to be applied prior to and during the *management activities**.

Indicator 9.2.3.* *Affected** and *interested stakeholders** and experts in the relevant topics are engaged in the development of specific actions to maintain and / or enhance the identified *High Conservation Values**.

Verifiers:

Documentary check:

- Lists of the experts and *interested stakeholders** who were consulted and participated in the development of actions for maintenance and enhancement of the *HCV**;
- Letters to the *interested stakeholders**
- Documents from public consultations and discussions, opinions, statements, etc.

Interviews:

- Provide information if the local *interested stakeholders** are acquainted with the presence of *HCVF** in the region and how they were engaged and consulted in development of actions for maintenance and enhancement of the identified *HCV**.

Indicator 9.2.4. The specific actions developed are effective to maintain and/or enhance the *High Conservation Values**.

Verifiers:

Documentary check:

- *HCVF** report with defined actions for maintenance and enhancement of the identified *HCV**;
- Availability of *procedures** that guarantee the implementation of actions for maintenance and enhancement of the identified *HCV**;
- Files of the sites with implemented forest *management activities** – check if prior to forest *management activities** the presence of *HCV** was considered and relevant *protection** measures were

stipulated in the technical documentation – technological plans, tree marking documents, etc.

Field check:

- Check if the measures applied for maintenance and *protection** of the *HCVF** are effective.

Interviews:

- Provide information for the effectiveness of the applied measures for maintenance and *protection** of the *HCV**.

Criterion 9.3. The *Organization** shall implement strategies and actions that maintain and/or enhance the identified *High Conservation Values**. These strategies and actions shall implement the *precautionary approach** and be proportionate to the *scale, intensity and risk** of *management activities**. (C9.3 P&C V4)

Indicator 9.3.1.* The *Organization** applies the developed specific actions to maintain and/or enhance the *High Conservation Values** and *High Conservation Value** Areas

Verifiers:

Documentary check:

- *HCVF** report with defined actions for maintenance and enhancement of the identified *HCV**;

- Availability of *procedures** to guarantee the application of the actions for maintenance and enhancement of the identified *HCV**;
- Files of the sites with implemented forest *management activities** are being held – check if prior to forest *management activities** the presence of *HCV** was considered and relevant *protection** measures were stipulated in the technical documentation – technological plans, tree marking documents, etc.
- Check of issued felling permissions (through the website of the Executive Forest Agency)

Field check:

- Check if the measures for maintenance and enhancement of the *HCV** were considered and applied prior to and during the implementation of the forest *management activities**.

Interviews:

- Provide information if the personnel is acquainted and applies measures for maintenance and enhancement of the *HCVF**.

Indicator 9.3.2.* The applied specific actions prevent damages and risks to *High Conservation Values**, even when the scientific information is incomplete or inconclusive, or the vulnerability and sensitivity of *High Conservation Values** are uncertain.

Verifiers:

Documentary check:

- *HCVF** report with defined actions for maintenance and enhancement of the identified *HCV**;
- Files of the sites with implemented forest *management activities**.

Field check:

- Check if measures for maintenance and *protection** of the *HCV** are being considered and applied.

Interviews:

- Provide information if the personnel is acquainted and applies measures for maintenance and enhancement of the HCVF*.

Indicator 9.3.3.* Activities that harm *High Conservation Values** cease immediately and actions are taken to *restore** and protect the *High Conservation Values**.

Verifiers:

Documentary check:

- Procedures or an order for the actions to be implemented in case of harmed *HCVF**;
- Files of the sites with implemented forest *management activities**.

Field check:

- Check for activities that harmed the *HCV**;
- Check if there have been undertaken measures to *restore** *HCV** harmed by the forest *management activities**.

Interviews:

- Provide information if the personnel is acquainted with the *procedures** for cessation of activities that harm the identified *HCV** and measures undertaken to *restore** the harmed *HCV**.

Criterion 9.4. The *Organization** shall demonstrate that periodic monitoring is carried out to assess changes in the status of *High Conservation Values**, and shall adapt its management strategies to ensure

their effective protection. The monitoring shall be proportionate to the *scale, intensity and risk** of *management activities**, and shall include *engagement** with *affected stakeholders**, *interested stakeholders** and experts. (C9.4 P&C V4)

Indicator 9.4.1.* In accordance with the recommendations for monitoring of *High Conservation Values** in the *Practical Guide for Identifying, Managing, and Monitoring of High Conservation Value Forests in Bulgaria**, a system is applied for periodic monitoring of the identified *High Conservation Values** and the effectiveness of actions implemented to maintain and/or enhance the *High Conservation Values**.

Verifiers:

Documentary check:

- *HCVF** report and its "Recommendations for monitoring" sections;
- Developed system/ programme for monitoring – a *procedure**, an order, etc.
- Filled in forms from implemented monitoring.

Field check:

- Check if the recommendations for monitoring provided in the *HCVF** report are applied.

Interviews:

- Provides information if the personnel is acquainted and applies a programme for monitoring.

Indicator 9.4.2. The monitoring program includes *engagement** with experts, *affected** and *interested stakeholders**.

Verifiers:

Documentary check:

- List of the experts who participated in the development of the *HCVF** report and its sections "Recommendations for monitoring".
- Letters and invitations to the *affected** and *interested stakeholders** and experts to participate in the monitoring activities.
- Developed system / programme for monitoring – a *procedure**, an order, etc.

Interviews with:

- Local *interested stakeholders** and experts about the opportunities given to them to participate in the monitoring of the *HCV** and about the extent they can actually participated.

Indicator 9.4.3. The monitoring program has sufficient scope, detail and frequency to detect changes in the identified *High Conservation Values*,* relative to the initial assessment and status identified for each *High Conservation Value**.

Verifiers:

Documentary check:

- *HCVF** report and its "Recommendations for monitoring" sections;
- Developed system/ programme for monitoring – a *procedure**, an order, etc.
- Completed forms from implemented monitoring.
- Documented changes in the condition of the identified HCV*

Field check:

- Check if the recommendations for monitoring provided in the HCVF* report are applied.
- Check if the system for monitoring allows to determine changes in the identified HCV*.

Interviews:

- With responsible personnel of the Organization* regarding their knowledge on the monitoring program.
- With responsible personnel of the Organization* to assess the scale, level of detail and frequency of the HCV* monitoring system.

Indicator 9.4.4. The results from the monitoring are documented in standard forms and an annual written analysis is made on this basis.

Verifiers:

Documentary check:

- *HCVF** report and its "Recommendations for monitoring" sections;
- Files of the forest sites
- Completed forms from implemented monitoring.
- Written annual analysis

Interviews:

- Provide information if the responsible personnel are acquainted with the recommendations for monitoring and how they fill in the monitoring forms.

Indicator 9.4.5.* The applied actions are adapted when monitoring or other new information shows that they are insufficient to ensure the maintenance and/or enhancement of *High Conservation Values**

Verifiers:

Documentary check:

- *HCVF** report and "Recommendations for monitoring" sections;
- Annual analysis of the results from the monitoring
- *Management plan**
- Files of the forest sites (logging sites)
- Reports, statements, findings protocols, etc.
- Letters and statements from *interested stakeholders** for changes in the *HCVF**
- Changes made in the measures for *protection** and /or the system for monitoring in the *HCVF** report and the relevant *procedures**.

Field check:

- Check if the adapted actions are being applied.

Interviews:

- Provide information if the responsible personnel use the information from the monitoring for changes/adaptation of the actions if necessary;
- Provide information if the relevant personnel are acquainted and apply the changes/ adaptation in the actions.

PRINCIPLE 10: IMPLEMENTATION OF MANAGEMENT ACTIVITIES

*Management activities** conducted by or for The *Organization** for the *Management Unit** shall be selected and implemented consistent with The Organization's economic, environmental and social policies and *objectives** and in compliance with the *Principles** and *Criteria** collectively. (new)

Criterion 10.1. After harvest or in accordance with the *management plan**, The *Organization** shall, by natural or artificial regeneration methods, regenerate vegetation cover in a timely fashion to pre-harvesting or more *natural conditions**. (new)

Indicator 10.1.1.* Harvested sites are regenerated in a *timely manner** that:

1) Protects affected *environmental values**; and

2) Is suitable to recover overall *pre-harvest* or *natural forest** composition and structure.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for logging
- Technological plans for afforestation

Field check:

- Check if the actions were implemented in accordance with what was stipulated in the plans.
- Check of the condition of the natural regeneration, supported regeneration and of the artificially made *forest cultures**.

Interviews:

- Provide information if the personnel and forest *workers**are acquainted with the appropriate methods for regeneration after harvest.
- Provide information if the stipulated in the documentation activities are being implemented.
- *Local communities** are also being interviewed (about the *pre-harvesting conditions**, affected *environmental values** etc.)

Indicator 10.1.2.* Regeneration fellings in *natural forests** are designed to ensure natural regeneration of the basic tree species typical for the region and in accordance with the site conditions and the economic objectives of the *Management Unit**.

Verifiers:

Documentary check:

- Forest management plan
- Tree-marking documentation of the harvesting areas where regeneration fellings are carried out.
- Technological plans for logging
- Technological plans for afforestation

Field check:

- On the field is checked if the planned regeneration fellings are implemented to ensure natural regeneration of the basic local tree species. Check of the natural regeneration status, supported regeneration or artificially made *forest cultures**.

Interviews:

- Provide information if the personnel and forest *workers** are acquainted with the specifics of the sylvicultural systems for natural regeneration. Check if the stipulated in the documentation activities are implemented in accordance with the provisions of *management plan** and relevant regulations.

Indicator 10.1.3.* Planting can be used for *restoration** of degraded *natural forest** ecosystems, for supplementing natural regeneration and after *large-scale natural disturbances**, if the following requirements are observed:

- Planting is carried out only on parcels where the natural regeneration is straitened and only local species and origins are used for it;
- Natural succession processes and the growth of the present early-successional local tree species are promoted.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for afforestation
- Relevant documentation in case of *large-scale natural disturbances**

Field check:

- Check if the afforestation meets the requirements of the indicator.

Interviews:

- Provides information if the personnel is acquainted and applies the requirements of the indicator.

Indicator 10.1.4.* Activities related to the regeneration of coppices lead to their transformation into high forest, except if other economic objectives are stipulated for them in the *management plan**.

Verifiers:

Documentary check:

- Forest management plan
- Tree marking documentation of coppice stands in which regeneration fellings are implemented

Field check:

- On the field is checked if the planned regeneration fellings are implemented in a way leading to natural seed regeneration of the forest. Check of the status of natural regeneration or planted trees.

Interviews:

- Provides information if the personnel is acquainted with the main objective for the management of coppice forests and if the stipulated regeneration activities are being implemented in accordance with the forest management plan and regulations.

Indicator 10.1.5. Activities related to regeneration of forest *plantations** are implemented in a way that leads to regeneration of the forest vegetation in accordance with the *management plan** and the requirements of national legislation. In cases where the objective is transformation of the forest *plantation** into forests with more natural species composition and structure, only native species and origins are used for regeneration.

Verifiers:

Documentary check:

- Forest management plan.
- Technological plans for harvesting.
- Technological plans for afforestation.

Field check:

- Check if the stipulated activities were implemented as described in the plans. Check if the planned

transformation is implemented through afforestation with *native species** and origins.

Interviews:

- Provides information if the personnel are acquainted with the requirements of the indicator.

Indicator 10.1.6. When artificial regeneration of forest *plantations** is prescribed in the *management plan** the afforestation is carried out within two years of the stand harvest.

Verifiers:

Documentary check:

- Documentation for harvesting and afforestation

Field check:

- Check if the harvested forest *plantations** are reforestated.

Interviews:

- Provides information if the personnel is acquainted with the deadlines for afforestation of harvested *plantations** and whether the deadline is being observed.

Indicator 10.1.7.* Forests of artificial origin that are not forest *plantations** are managed in a way and methods enhancing their transformation into *natural forests**:

- The methods enhance the regeneration of native tree species typical for forests in the region ;
- The sylvicultural activities contribute to the creation and maintenance of structural characteristics typical for the *natural forests** in the region.

Verifiers:

Documentary check:

- Forest management plan.
- Technological plans for harvesting.
- Technological plans for afforestation.

Field check:

- Check if the activities are implemented in accordance with the documentation.

Interviews:

- Provide information if the personnel is acquainted with the requirements for forest *restoration**.

Indicator 10.1.8.* Efforts are made to *restore** the natural species composition and structure of degraded forest *ecosystems**.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for afforestation
- Documentation for cases of *large-scale natural disturbances**

Field check: Check if the requirements of the indicator are observed.

Interviews: Provide information if the personnel is acquainted and applies the requirements of the indicator.

Indicator 10.1.9.* Artificial afforestation of *natural open fields** within forest territories is not allowed except for control of erosion processes.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for afforestation

Field check:

- Check if *natural open fields** are not afforestated.

Interviews:

- Provides information if the personnel is acquainted with the requirement that *natural open fields** shall not be afforestated.

Criterion 10.2. The *Organization** shall use species for regeneration that are ecologically well adapted to the site and to the *management objectives**. The *Organization** shall use *native species** and local *genotypes** for regeneration, unless there is clear and convincing justification for using others. (C10.4 and C10.8 P&C V4)

Indicator 10.2.1.* Forests of local tree species are not transformed into forest *plantations** or into *forest cultures** of *alien species**.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for harvesting
- Technological plans for afforestation

Field check:

- Check if forests of local tree species are transformed into forests of *alien species** or forest *plantations**.

Interviews:

- Provide information if the personnel are acquainted and apply the requirements of the indicator.

Indicator 10.2.2.* Species used for planting by the *Organization** are native species of local provenance and are ecologically well adapted to the site.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for afforestation
- Documentation for cases of large-scale *natural disturbances**
- Documents with justification of the necessity of afforestation with *alien species** and *genotypes**.

Field check:

- Check if the requirements of the plans are implemented on the field.

Interviews:

- Provide information if the personnel and forest *workers** are acquainted with the species used in planting and what are their ecological site demands.

Indicator 10.2.3.* *Non-native species** and non-local genotypes are not used unless clear and convincing

justification is provided.

Documentary check:

- Documents justifying the need of using *non-native species** and non-local *genotypes**.

Indicator 10.2.4.* The area planted with *alien species** and *genotypes** does not exceed 5% of the forested area.

Note: The 5% limit does not apply for areas managed as forest *plantations**.

Documentary check:

- Forest management plan;
- Technological plans for planting.

Indicator 10.2.5. The choice of species for planting is clearly justified and documented in relation to the planting objectives and the general *management objectives**.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for afforestation
- Documentation for cases of large-scale *natural disturbances**
- Documents with justification for the necessity of afforestation with *alien species** and *genotypes**.

Interviews:

- Provide information if the personnel and forest *workers** are acquainted with the species used for planting and what are the economic or ecological objectives.

Indicator 10.2.6.* The use of *alien species** for *restoration** of degraded land is allowed only if no alternatives are available and if a justification is provided.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for afforestation
- Documents with justification for the necessity of afforestation with *alien species** and *genotypes**.

Field check:

- Check if during the *restoration** activities were used only species that naturally occur in the region.

Interviews:

- Provide information if the personnel is acquainted and applies the requirements of the indicator.

Criterion 10.3. The *Organization** shall only use *alien species** when knowledge and/or experience have shown that any invasive impacts can be controlled and effective mitigation measures are in place. (C6.9 and C10.8 P&C V4)

Indicator 10.3.1.* *Alien species** listed in Annex 8 are not used for afforestation.

Note: *Robinia pseudacacia* can be used for afforestation only in forest *plantations** (see the definition of *plantation** in the glossary) where the forest managers strictly control the distribution of the species.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans for afforestation

Field check:

- Check if afforestations and reforestations are made with species from Annex 8

Interviews:

- Provide information if the personnel is acquainted with and applies the requirements of the indicator.

Indicator 10.3.2.* The *Organization** monitors and controls the distribution of *invasive species** on its territory and is alert for possible negative ecological impacts.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans
- Documented programme/system for monitoring and control of *invasive species**

Field check:

- Check if uncontrolled distribution of *alien species** and negative environmental impact over neighbouring territories are in place.

Interviews:

- Provide information if the personnel is acquainted and applies a programme/system for monitoring and control of the distribution of *invasive species**.

Indicator 10.3.3.* Programmes for removal of *alien species** with clear invasive potential are developed and applied.

Verifiers:

Documentary check:

- Forest management plan
- Documented programme for monitoring and control of *invasive species**
- Programme for removal of *alien species** with invasive potential.

Field check:

- Check if there is invasive distribution of *alien species** and if measures were applied to control the distribution.

Interviews:

- Provide information if the personnel and the forest *workers** are acquainted and apply the programme for removal of *alien species** with invasive potential.

Criterion 10.4 The *Organization** shall not use *genetically modified organisms** in the *Management Unit**. (C6.8 P&C V4)

Indicator 10.4.1.* *Genetically modified organisms** are not used in forest *management activities**.

Verifiers:

Documentary check:

- Forest management plan
- Documented orders that prohibit the use of *GMO**

- Documents related to the use of *GMO** in forest *management activities**

Field check:

- Check if *GMO** were used.

Interviews:

- Provide information if the personnel is acquainted with and applies the prohibition for *GMO** use.

Criterion 10.5. The *Organization** shall use silvicultural practices that are ecologically appropriate for the vegetation, species, sites and *management objectives**. (new)

Indicator 10.5.1.* Silvicultural systems are applied that create and maintain species, age and structural diversity both on stand and *landscape** levels. Priority is given where appropriate to fellings with long-term regeneration period and selection fellings.

Verifiers:

Documentary check:

- Forest management plan
- Tree-marking documentation of the harvested stands.

Field check:

- Check if suitable sylvicultural systems are used.

Interviews:

- Provide information if the personnel is acquainted with the suitable sylvicultural systems and practices.

Indicator 10.5.2.* Clear fellings are not applied except in *plantations** and *forest cultures** of poplar, black locust, and lime. The area of clear fellings in lime stands is not bigger than 1 ha.

Verifiers:

Documentary check:

- Forest management plan
- Tree-marking documentation of the stands in which harvesting was made

Field check:

- Check if clear fellings are carried out in forest types different from those specified in the indicator.

Interviews:

- Provide information if the personnel apply the clear fellings limitations.

Indicator 10.5.3.* Thinnings in the managed stands are carried out in accordance with the following principles:

- the collective and individual stability of the stands is ensured;
- the growth of *trees of the future** is supported by applying the principles of *positive selection**;
- the linear systematic felling and thinning from below are not used;
- the presence of single trees of valuable species as well as valuable genetic forms are promoted.

Verifiers:

Documentary check:

- Forest management plan
- Tree-marking documentation

- Technological plans

Field check:

- Check if the mentioned in the indicator principles are applied.

Interviews:

- Provide information if the personnel are acquainted with the principles mentioned in the indicator.

Indicator 10.5.4.* Thinnings and regeneration fellings are designed to retain elements important for maintenance of the *biological diversity** in the forest *ecosystem** (*old-growth islands*, tranquility zones**, single and groups of *biotope trees**, specific *microhabitats**, etc.)

Verifiers:

Documentary check:

- Forest management plan
- Tree-marking documentation
- Technological plans

Field check:

- Check if elements important for maintenance of *biodiversity** mentioned in the indicator are retained in the forest.

Interviews:

- Provide information if the personnel is acquainted with the requirements for retention of elements important for maintenance of *biodiversity** in the *forest ecosystem**.

Indicator 10.5.5.* If no other objectives are specified in the forest management plan, the management of *forest cultures** is designed to promote their transformation into *natural forests** through:

- support of the regeneration of local native species;
- formation and maintenance of structural stand characteristics typical for the natural forests in the region.

Verifiers:

Documentary check:

- Forest management plan
- Tree-marking documentation
- Technological plans

Field check:

- Check if the principles mentioned in the indicator are applied.

Interviews:

- Provide information if the personnel are acquainted with and apply the indicator.

Criterion 10.6. The *Organization** shall minimize or avoid the use of *fertilizers**. When *fertilizers** are used, The *Organization** shall demonstrate that use is equally or more ecologically and economically beneficial than use of silvicultural systems that do not require *fertilizers**, and prevent, mitigate, and/or repair damage to *environmental values**, including soils. (C10.7 P&C V4 and Motion 2014#7)

Indicator 10.6.1.* *Fertilizers** are not used except in *plantations** and forest nurseries.

Verifiers:

Documentary check:

- Register of used *fertilizers**
- Technological plans for afforestation
- Invoices for purchased *fertilizers**

Interviews:

- Provide information if *fertilizers** are used and if the personnel is aware of the requirement to diminish the usage of *fertilizers**.

Field check:

- Check of the forest nurseries
- Check of store premises
- Check of areas prepared for planting with the use of *fertilizers**

Indicator 10.6.2.* The use of *fertilizers** in *plantations** and nurseries is admissible only in cases of justified necessity.

Documentary check:

- Results of soil analyses
- Justifications for the use of *fertilizers**

Interviews:

- Provide information if the *personnel** is aware of the requirements of the indicator.

Indicator 10.6.3.* The use of *fertilizers** in cases according to 10.6.2 is kept to minimum levels.

Documentary check:

- Documents proving that the usage of *fertilizers** is minimized or is in process of minimization aiming at complete termination of the usage of *fertilizers**.

Interviews:

- Provide information if *fertilizers** are used and if the personnel is aware of the requirements of the indicator.

Indicator 10.6.4.* In *plantations** and forest nurseries, *fertilizers** are not used in buffer zones of 20 m from water sources, *water bodies** and localities of *rare** and *threatened** species.

Field check:

- Check of forest nurseries
- Check of store premises
- Check of areas that are in preparation process for planting and fertilization is planned for them.

Interviews:

- Provide information if *fertilizers** are used and if the personnel is aware of the requirements of the indicator.

Indicator 10.6.5. The usage of *fertilizers** is documented by recording the following information:

a) type of *fertilizers**
b) location of the site where they were used
c) fertilized area
d) date of use

e) quantity of *fertilizers** used

Verifiers:

Documentary check:

- Register of the used *fertilizers**

Interviews:

- Provide information if *fertilizers** are being used and if the personnel is aware of the requirement to keep a register of the *fertilizers** use.

Indicator 10.6.6.* When *fertilizers** are used, *environmental values** are protected, including through implementation of measures to prevent damage.

Verifiers:

Documentary check:

- Programme or guideline for *protection** of the *environmental values** in the cases when *fertilizers** are used.
- Instructions for application of measures for prevention of negative impacts.

Field check:

- Check if there are negative impacts from the usage of *fertilizers** and what measures for prevention of the negative impacts were applied.

Interviews:

- Provide information if the personnel is aware of and applies the measures for prevention of the negative impacts from the use of *fertilizers**.

Indicator 10.6.7.* Negative environmental impacts from the use of *fertilizers** are mitigated and damaged *environmental values** are restored.

Verifiers:

Documentary check:

- Programme, instructions or other documentation for implementation of measures for mitigation and/or *restoration** of negative impacts from the use of *fertilizers**.

Field check:

- Check if there are negative impacts from the use of *fertilizers** and what measures are taken to mitigate the impact or to *restore** the damages.

Interviews:

- Provide information if the personnel is aware and applies measures for mitigation and/or *restoration** of the negative impacts caused by the use of *fertilizers**.

Criterion 10.7 The *Organization** shall use integrated pest management and sylviculture systems which avoid, or aim at eliminating, the use of chemical *pesticides**. The *Organization** shall not use any chemical *pesticides** prohibited by FSC policy. When *pesticides** are used, The *Organization** shall prevent, mitigate, and/or repair damage to *environmental values** and human health. (C6.6 and C10.7 P&C V4)

Indicator 10.7.1.* Integrated pest management, including selection of specific *sylviculture** systems, is used to minimize the frequency, extent and amount of chemical *pesticide** applications, aiming at non-use or overall significant reduction of applications.

Verifiers:

Documentary check:

- Programmes for monitoring and control of the *pests** and results of these programmes.
- Programme for diminishing the usage of chemical *pesticides**
- Technological plans
- Reports from the Forest Protection Stations.

Field check:

- Check of the applied methods for control of the *pests**.

Interviews:

- Provide information if the personnel is aware and applies the programmes for monitoring and control of the *pests** and diminishing of the usage of chemical *pesticides**.

Indicator 10.7.2.* The use of chemical *pesticides** is based on written analysis of the most appropriate alternative methods and is allowed only when:

- Alternative products and practices are not known;
- The known alternative products and practices have been proven to be ineffective;
- The use of alternative products and practices is significantly more expensive than the chemical *pesticides**.
- The chosen product, application method, time and way of use of the chemical *pesticide** provide for the smallest risk for people and non-target species.

Verifiers:

Documentary check:

- Written analysis of the alternative methods

Interviews:

- Provide information of the personnel is aware of the requirement for documentation of the alternative methods that were considered and rejected prior to use of chemical *pesticides**.

Indicator 10.7.3.* Chemical *pesticides* prohibited by FSC are neither stored nor used within the *Management Unit**, unless a derogation has been approved by FSC.

Note: *See Annex 9 - List of highly hazardous pesticides according to FSC-STD-30-001a EN*

Verifiers:

Documentary check:

- Programme for the use of chemical pesticides*
- Current list of the chemical *pesticides** prohibited by FSC
- Register of the used chemical *pesticides**

Interviews:

- Provide information if the personnel is aware with the *procedures** for use of prohibited chemical *pesticides**.

Field check:

- Check of the warehouses
- Check of forest nurseries

Indicator 10.7.4.* A register of the chemical *pesticides** used is kept. The register contains information on:

- trade name of the used product
- active ingredients
- quantity of the used active ingredients
- date/ period of use
- location of the site treated
- size of the treated area within the site
- method of application
- reason for use of the chemical *pesticides**

Verifiers:

Documentary check:

- Register of the chemical *pesticides**

Interviews:

- Provide information if the personnel is aware with the requirements for registration of the used chemical *pesticides**.*

Indicator 10.7.5.* The use of *pesticides** complies with the ILO document "Safety in the use of chemicals at work" (see Annex 10) regarding requirements for transport, storage, handling, application and emergency *procedures** for cleanup following accidental spillages.

Verifiers:

Documentary check:

- A valid risk assessment that includes measures for health and safety working conditions in chemicals use.
- Evidence for trainings of the personnel responsible for work and storage of chemicals.

Field check:

- Check if the health and safety instructions for work with and storage of chemicals are observed.

Interviews:

- Provide information if the personnel and forest *workers** are aware and observe the health and safety instructions for work with and storage of chemicals.

Indicator 10.7.6.* *Procedures** with measures for *timely** neutralization of spills or other accidents with chemicals are in place. Detailed documentation is kept about all incidents involving chemicals.

Verifiers:

Documentary check:

- Written *procedure** for applying of urgent measures for neutralization of spills or other accidents with chemicals.
- Documentation of performed instructions of the personnel
- Register of accidents
- Written instructions for work with chemicals

Field check: Check if means for neutralization of spills or other accidents with chemicals are available on the field.

Interviews: Provide information if the personnel is aware and applies the *procedures** in case of spill or other

accidents.

Indicator 10.7.7.* Personnel working with chemical *pesticides** are trained for work with chemicals and management of urgent situations.

Verifiers:

Documentary check:

- Documentation of performed trainings of the personnel

Interviews:

- Provide information if the personnel is aware and applies the measures for use of chemical *pesticides**

Indicator 10.7.8.* During the usage of chemical *pesticides** the following general requirements are respected:

- Chemical *pesticides** are applied in the minimum effective quantities strictly following the instructions of the producer and the relevant regulations;
- The usage of chemical *pesticides** is prohibited within 20 meters of water courses and within 30 meters of still water reservoirs, dams and lakes;
- The usage of chemical *pesticides** is forbidden if heavy rainfalls are expected, if the weather is wet and windy, or over land which is frozen, snow covered or dry from drought;
- Soaking of seedlings treated with chemicals into water courses, lakes, marshes, water sources, karst springs or other *water bodies** is prohibited;
- Buffer zones where chemical *pesticides** are not applied are established around the *habitats** of *rare** and *threatened** species, rare plant communities, riparian sites and *wetlands**.

Verifiers:

Documentary check:

- Documented instructions for the usage of chemical *pesticides** that include the requirements of the indicator.
- Register of the used chemical *pesticides**

Field check:

- Check if the requirements of the indicator are applied on the field.

Interviews:

- Provide information if the personnel is aware and applies the norms for usage of chemical *pesticides**.

Indicator 10.7.9.* At least 2 weeks before the use of chemical *pesticides** that may have negative impacts on people, domestic and farm animals (including bees), products and activities (for instance if the use is planned to be close to large unfenced areas, bee hives, pastures, arable land, etc.) the relevant communities and local interested parties are informed (for instance farmers, beekeepers, herb-gatherers, mushroom-gatherers, tourist associations, etc.) of the chemical *pesticides** that will be used, the area that is to be treated and the potential negative impacts.

Verifiers:

Documentary check:

- Documented *procedure** for informing the communities and local interested parties in case of use of

chemical *pesticides**.

- Evidence that the *local communities** and interested parties were informed before the use of chemical *pesticides**.

Interviews:

- Provide information if the personnel is aware and applies the *procedure** for informing the local municipalities and interested parties before the use of chemical *pesticides**.
- With the municipalities and local interested parties.

Criterion 10.8 The *Organization** shall minimize, monitor and strictly control the use of *biological control agents** in accordance with *internationally accepted scientific protocols**. When *biological control agents** are used, The *Organization** shall prevent, mitigate, and/or repair damage to *environmental values**. (C6.8 P&C V4**)**

Indicator 10.8.1.* The use of *biological control agents** is minimized, monitored and strictly controlled. *Biological control agents** are used only in cases of scientifically proven necessity and in accordance with the national legislation.

Verifiers:

Documentary check:

- *Procedure** for use of *biological control agents** that includes instructions for diminishing the use and the methods for control and monitoring.
- Register of the used *biological control agents**.
- Motivation for the use of *biological control agents**
- Evidence for implemented monitoring and control in the cases when *biological control agents** were used.

Interviews:

- Provide information if the personnel is aware with the requirements for control and monitoring of the *biological control agents**.

Indicator 10.8.2. The use of *biological control agents** is documented by keeping a register with information about the type, quantity, period, location, area and reason for use.

Verifiers:

Documentary check:

- Register of the used *biological control agents**.

Interviews:

- Provide information if the personnel is aware with the requirement for keeping a register of the *biological control agents**.

Indicator 10.8.3.* Damage to *environmental values** caused by the use of *biological control agents** is prevented and *restoration** measures are applied where damage occurs.

Verifiers:

Documentary check:

- Programme for the use of *biological control agents**.
- *HCVF** Report – to check if *biological control agents** were used in *HCVF**.
- Documented activities of applying measures for prevention and mitigation of negative impacts by

the usage of biological control agents* over the *environmental values**. Documented *restoration** measures in the cases of caused damage.

Interviews:

- Provide information if the personnel is aware with the requirements for applying measures for prevention and mitigation of the negative impacts from *biological control agents** over *the environmental values**. Provide information if in the cases of caused damage *restoration** measures were applied.

Criterion 10.9 The *Organization** shall assess risks and implement activities that reduce potential negative impacts from *natural hazards** proportionate to *scale, intensity, and risk**. (new)

Indicator 10.9.1. A risk assessment is available regarding the type, frequency and level of impact from *natural hazards** and *natural disturbances** that potentially may occur within *the Management Unit** (for instance floods, strong winds, avalanches, fires, landslides, etc.) and the possible negative impacts on the infrastructure, forest resources and communities.

Verifiers:

Documentary check:

- Documented risk assessment regarding the type, frequency and level of impact from *natural hazards** and *natural disturbances** that potentially may occur on the territory of *the Management Unit** (for instance floods, strong winds, avalanches, fires, landslides, etc.)
- Forest management plan

Interviews:

- Provide information if the personnel is aware of the *risk** from *natural hazards** and *natural disturbances** that may happen on the territory of the *Management Unit** and the possible negative impacts.

Indicator 10.9.2. When preparing the assessment according to 10.9.1 the following documents are to be used:

- Plans for management of the risk from floods
- Plans for fire prevention and fire combating
- National program for prevention and control of landslides on the territory of the Republic of Bulgaria, erosion and abrasion at the Black Sea coast and the Danube River banks.
- National program for protection in cases of disaster and annual plans related to the program.
- Operational documents at a district level

Documentary check:

- Check of the documented assessment according to 10.9.1
- Check of the documents according to 10.9.2.

Indicator 10.9.3. Measures are planned and applied to reduce the anticipated negative impacts from potential *natural hazards** and *natural disturbances**.

Verifiers:

Documentary check:

- Documentation for planned and applied measures for reduction of the expected negative impacts

from the potential *natural hazards** and *natural disturbances**.

- Forest management plan

Field check:

- Check if the planned measures for reduction of the expected negative impacts are applied.

Interviews:

- Provide information if the personnel is aware and applies the planned measures for reduction of the expected negative impacts.

Indicator 10.9.4.* The risk for *management activities** to increase the frequency, distribution or severity of *natural hazards** is assessed.

Verifiers:

Documentary check:

- Assessment of the *risk** from the *management activities** regarding the resistance to *natural hazards**. The assessment includes the *natural hazards** (e.g. floods, avalanches, fires, etc.) typical for the *Management Unit**

Field check:

- Check if on the field the applied forest *management activities** have diminished the resistance of the forest regarding *natural disturbances** and if they have affected the *risk** to increase the frequency, distribution or severity of the *natural hazards**.

Interviews:

- Provide information if the personnel are aware with the negative impacts from the *management activities** regarding the resistance of the forest and the *risk** to increase the frequency, distribution or severity of the *natural hazards**.

Indicator 10.9.5.* *Management activities** are modified and/or measures are developed and implemented that reduce the identified risks.

Verifiers:

Documentary check:

- Assessment of the risk from the implemented forest *management activities** regarding the resistance of the forest to *natural hazards** and increase of the frequency, distribution or severity from *natural hazards** resulting from forest *management activities**.
- Developed measures for change of the applied practices in case of negative assessment.

Field check:

- Check if measures are applied for diminishing the risk from negative impacts from *natural hazards** resulting from the forest *management activities**.

Interviews:

- Provide information if the personnel are aware of the planned measures for reduction of the risk of negative impacts from *natural hazards** resulting from forest *management activities**.

Criterion 10.10 The *Organization** shall manage infrastructural development, transport activities and silviculture so that water resources and soils are protected, and disturbance of and damage to *rare** and *threatened species*, habitats*, ecosystems* and landscape values** are prevented, mitigated and/or repaired. (C6.5 P&C V4)

Indicator 10.10.1.* Planning, development, maintenance and utilization of infrastructure within the *Management Unit** ensures the *protection** of:

- *Ecosystem functions** of forests;
- *Biological diversity**;
- Water resources and *water bodies**;
- Soils;
- *Landscape values**.

Verifiers:

Documentary check:

- *Management plan** (check up to what extent the documents include preventive measures regarding the indicator)*;*
- Technical projects for development of certain infrastructure;
- Environmental assessments in conformity with the legislation;
- Assessments of the impact from small infrastructure (assessments that are not obligatory according to the national legislation).

Field check:

- Check if the applied measures and actions fulfil the requirements of the indicator on the field – evidences for erosion, mechanical damage on the trees, etc.

Interviews:

- Provide information if the personnel is aware with the measures and actions related to the requirements of the indicator.

Indicator 10.10.2.* The following norms are observed in the development, maintenance and usage of forest roads:

- new roads are planned in advance on topographical maps that show water courses;
- roads are planned in a way that allows minimum changes to the terrain;
- where possible roads are set on natural benches, ridges and flatter slopes;
- construction of roads is minimized in steep and narrow valleys, in landslide risk or other unstable areas and where natural drainage channels or water courses exist;
- roads are not built through ecologically vulnerable areas;
- embankments and cuttings are stabilized to prevent erosion;
- drains and culverts are designed to minimize erosion.

Verifiers:

Documentary check:

- Forest management plans
- Plans for forest roads
- Forest maps

Field check:

- Check if the forest roads meet the requirements of the indicator.

Interviews:

- Provide information if the personnel is aware and applies the requirements of the indicator.

Indicator 10.10.3.* The following norms are observed during the implementation of forest *management activities**:

- machinery and technologies are used that minimize the damages to vegetation, soil and road infrastructure;
- on logging sites and terrain with a slope greater than 25°, the wood extraction is carried out only by animals or cable lines. The use of tractors with winches is acceptable if they are stationed on neighbouring ground;
- transportation and extraction of wood is not allowed on forest roads of 4th category nor on skidding routes when soils are saturated (due to heavy rainfall, snowmelt, etc.);
- after logging, the skidding routes where erosion processes may develop are restored and/or measures to avoid erosion are applied (piles of branches, hurdles, cross ditches, etc.)

Verifiers:

Documentary check:

- Forest management plans
- Tree-marking documentation
- Technological plans

Field check:

- Check if the requirements of the indicator are observed.

Interviews:

- Provide information if the personnel are aware and applies the requirements of the indicator.

Indicator 10.10.4.* Negative impacts on water resources, soils, *rare** and endangered species, *habitats*, ecosystems** and *landscape**, due to development, maintenance and operation of infrastructure are avoided or mitigated, and the affected *environmental values** are *restored** in a *timely manner**. Where negative impacts are identified, forest *management activities** are modified to prevent further damage.

Documentary check:

- Plans, projects and programs with compensatory measures and activities for elimination of the negative impacts over *biological diversity*, environmental and landscape values*.*

Field check:

- Check for the implementation of preventive and *restoration** measures (*restoration** of habitats and water courses, prevention of erosion, etc.)

Interviews:

- Provides information if the staff is familiar with and implements the measures and actions related to the reduction of negative impacts and *restoration** of the damaged values.

Criterion 10.11. The *Organization** shall manage activities associated with harvesting and extraction of timber and non-timber forest products so that *environmental values** are conserved, merchantable waste is reduced, and damage to other products and services is avoided. (C5.3 and C6.5 P&C V4)

Indicator 10.11.1.* Harvesting and extraction practices for timber and *non-timber forest products** are implemented in a manner that conserves *environmental values** as identified in *Criterion** 6.1.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans
- *HCVF** report
- Other relevant documents

Field check-up:

- Checks for damages on the field.

Interviews:

- Provide information if the personnel are aware of the identified *environmental values** and the measures for their *protection**.

Indicator 10.11.2.* Logging and cutting of wood is carried out in a manner ensuring optimal economic use of wood resources and reduction of wood waste with commercial value.

Verifiers:

Documentary check:

- Trainings / instructions of the personnel and forest *workers** for optimal use of the wood and reduction of wood waste with commercial value

Field check:

- Check for damages on trees that are left after the logging, unused wood with commercial value, etc.

Interviews:

- Provide information if the personnel knows and applies the requirements for optimal usage of the wood and *protection** of other forest resources.

Indicator 10.11.3. Harvested wood is extracted from harvesting sites and transported from the roadside wood storages in a *timely manner** to avoid reduction of the wood value.

Verifiers:

Documentary check:

- Felling permits
- Wood transport documentation
- Other relevant documents

Field check-up: Check if on the harvesting areas and roadside wood storages there is harvested wood not extracted or transported in a *timely manner**.

Interviews: Provide information if the personnel and forest *workers** are aware and apply the requirements of the indicator.

Indicator 10.11.4.* In the implementation of thinnings and regeneration fellings, standing and fallen *deadwood** and dying trees are retained that are preferably of a diameter over 22 cm. The deadwood volume is not less than 10% of the *growing stock of the stand** before logging. If 10% of the *growing stock** is not available in the stand, measures are implemented to ensure accumulation of the necessary amount of *dead wood** in future.

Verifiers:

Documentary check:

- Forest management plan
- Tree-marking documentation

- Other relevant documents – orders, *procedures**, instructions.

Field check:

- In the harvested areas the auditor checks the quantities of dead wood and dying trees left after the logging operations.

Interviews:

- Provide information if the personnel and forest *workers** are aware and apply the requirements of the indicator for *dead wood** retention.

Indicator 10.11.5.* Felling and wood extraction are designed and conducted in such a way as to reduce damages to the remaining standing trees and regeneration. If necessary, measures are applied for individual or group *protection** of the remaining standing trees.

Verifiers:

Documentary check:

- Forest management plan
- Technological plans
- Other relevant documents – orders, *procedures**, instructions.

Field check:

- Check if there are damages on the remaining standing trees and if measures for *protection** are applied.

Interviews:

- Provide information if the personnel and forest *workers** are aware and apply the requirements of the indicator.

Criterion 10.12. The *Organization** shall dispose of waste materials in an environmentally appropriate manner. (C6.7 P&C V4)

Indicator 10.12.1* The *Organization** applies *waste** management system on its territory, including:

- Rules for collection of *waste** in appropriate places (including in logging sites).
- Measures to prevent illegal disposal and *waste** disposal in forests, including *waste** from visitors.
- Prohibition of disposal of *waste** in *water bodies**, by burying or by direct combustion;
- Rules for transport, storage or disposal of chemicals, fuels, oils, containers, liquid and solid *waste** in an environmentally appropriate and *legal** manner.

Verifiers:

Documentary check:

- Plan for *waste** management
- Other relevant documents – *procedures**, orders, instructions

Field check:

- Checks if there is *waste** in the forest and logging sites.

Interviews:

- Provide information if the personnel and forest *workers** know the rules for *waste** management

Indicator 10.12.2.* During forestry operations within the territory of the *Management Unit**, the following are applied:

- Rules for placement of fuel tanks and stores so that spillages from damage, defects or refueling shall not

enter watercourses.

- Measures to prevent oil and fuel leaks from forestry and transport equipment and the use of absorption kits in case of fuel or lubricants spills;
- Rules for use of biodegradable oil for lubrication of the chains of chainsaws as well as for use of containers that ensure leak-proof conditions and appropriate means for absorption of oils and fuels at refueling locations.

Verifiers:

Documentary check:

- Plan for management of fuel and oil
- Technological plans
- Other relevant documents – *procedures**, orders, instructions

Field check:

- Check the placement of storages and observation of the rules for refueling and the availability of appropriate absorbents.

Interviews:

- Provide information if the personnel is aware and applies the rules for work with fuel and oil and the *procedures** for action in case of spills.

10. **Annexes of the standard**

Annex 1: List of the applicable legislation

*The list is indicative and does not claim for absolute comprehensiveness.

The Organization is obliged to comply with all national legislation, the relevant local regulations and ratified international conventions.

Relevant Principle/Criterion/Indicator of the National FSC Standard	Thematic area	Applicable International law	Applicable national legislation
1.	Customary rights protected by national legislation		*Tenure:* State property law, Private property law, Municipal property law. *Gathering non-timber forest products:* Law on medicinal plants, Biodiversity Law. *Gathering wood and access to forest:* Forestry Act.
1.1	legal status and registration of the organization		Commercial Law. Law for Non-Profit Organizations. Forestry Act. Denominations Act. Law on community centers.
1.2	legal status of the Management Unit including property rights and use		Commercial Law. Law for Non-Profit Organizations. Forestry Act. Denominations Act. Law on community centers.
1.3.1.	animal welfare and protection of animal health requirements		Law on Protection of Animals. Veterinary Law and relevant regulations.

1.2.2.	borders of the Management Unit		Cadastre Act. Forestry Act. Ordinance № 6 of 5.02.2004 on the organization of forests and forest lands and hunting areas in the Republic of Bulgaria (Ordinance for inventory of forest areas and forest planning).
1.3.3.	timely payment of taxes and other duties		Law on Local Taxes and Fees. Law on Value Added Tax. Law on Corporate Income Tax. Law on Taxes on personal income. State Budget Act (for the relevant year).
1.4, 1.8	prevention and control of illegal activities in forests		Forestry Act. Protected Areas Act. Biodiversity Act. Medicinal Plants Act. Law on Hunting and Game Protection. Law on Fisheries and Aquaculture. Ordinance № 1 of 30.01.2012 on control and protection of forest areas and the amending regulations. Ordinance No 8 of 11.05.2012 on the terms and conditions to protect forest areas from fire. Ordinance №8 of August 5, 2011 for felling in forests.
1.5	Transportation and marketing of forest products	CITES Convention	Forestry Act. Biodiversity Act. Customs Act. Instruction for cooperation between the Ministry of Environment and Water, "Customs" Agency and the Bulgarian Agency for Food Safety to enhance the effectiveness of control on entry, trade, transit and export of specimens of endangered species of wild fauna and flora

2.1	principles and workers' rights	Convention No. 29 of ILO	Constitution of the Republic of Bulgaria. Labour Code. Law on Combating of Traffic of Human Beings. Penalty Code.
		Convention No. 87 of ILO	Law for Non-Profit Organizations. Law on Defense and Armed Forces of the Republic of Bulgaria. Law for the Ministry of the Interior. Law on Meetings, Demonstrations and Parades. Law on Settlement of Collective Labour Disputes. Labour Code. Penalty Code. Law on Civil Servants.
		Convention No. 98 of ILO	Labour Code. Law on Civil Servants. Law on Defense and Armed Forces of the Republic of Bulgaria. Law on the Ministry of the Interior. Railway Transport Act.
		Convention No. 100 of ILO	Labour Code. Law on Protection from Discrimination. Rules for the structure and activities of the Commission for Protection against Discrimination.

		Convention No. 105 of ILO	Constitution of the Republic of Bulgaria. Labour Code. Law on Combating the Traffic of Human Beings. Penalty Code.
		Convention No. 111 of ILO	Rules for the structure and activities of the Commission for Protection against Discrimination. Rules for the structure and organization of the work of the National Council on Equality between Women and Men. Law on Protection from Discrimination. Labour Code. Social security Code. Law on Civil Servants. Law on employment promotion.
		Convention No. 138 of ILO	Labour Code. Ordinance № 6 on the conditions and procedure for granting work permits to persons under 18 years. Ordinance on the work of persons under 15 years of age.
		Convention No. 182 of ILO	Law on Child Protection. Law on Combating the Traffic of Human Beings. Law on Family Allowances. Ordinance № 6 on the conditions and procedure for granting work permits to persons under 18 years. Labour code. Penalty Code.

2.2	gender equality		Law on Protection from Discrimination.
2.3	protection of workers from occupational accidents and diseases	Convention No. 155 of ILO	
		Safety and health in forestry work: An ILO code of practice	Rules on health and safety at work in forests.
2.3.4	register of occupational accidents		Ordinance for the establishment, investigation, registration and reporting of accidents.
2.4	renumerations, minimum wage		Labour Code. Decrees of the Council of Ministers to determine the minimum wage Law on Obligations and Contracts Collective and branch contract.
4.2	legal rights of local communities		Constitution of the Republic of Bulgaria. Property law. Law on Hunting and Game Protection. Protected Areas Act. Forestry Act. Medicinal plants Act.
5.1	full use of the various benefits of forests		Forestry Act. Medicinal Plants Act.
5.2, 10.1	volume of production/logging		Forestry Act. Ordinance № 6 of 5.02.2004 on the organization of forests and forest lands and hunting areas in the Republic of Bulgaria (Ordinance for inventory of forest areas and forest planning)

5.4	support for local economy		Forestry Act. Ordinance on the terms and conditions for awarding the implementation of activities in forest areas - state and municipal property, and for the use of timber and non-timber forest products.
6.2	impacts on environmental values		Law on Environmental Protection. Ordinance on the conditions and procedures for implementation of environmental impact assessment. Biodiversity Act. Ordinance on the conditions and procedures for implementation of appropriate assessment for plans, programs, projects and investment proposals with the objective and conservation purpose of protected zones (Natura 2000 zones). Protected Areas Act. Ordinance No 5 of 07.31.2014 for construction in forest areas without change of land use.
6.4	protection of rare and endangered species and their habitats	CITES Convention Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	Ordinance № 8 of August 5, 2011 for felling in forests. Forestry Act. Protected Areas Act.

6.7	protection of water streams and water bodies		Water Act. Law on Environmental Protection. Ordinance №3 of 2000 on the terms and conditions for research, design, approval and operation of sanitary zones around water sources and facilities for drinking water supply and around the sources of mineral water used for therapeutic, prophylactic, drinking and hygiene needs.
6.9	change of land and forest use		Forestry Act. Law on Spatial Planning.
7.2, 7.3, 7.4	Forest management plan		Forestry Act. Ordinance № 6 of 5.02.2004 on the organization of forests and forest lands and hunting areas in the Republic of Bulgaria (Ordinance for inventory of forest areas and forest planning). Ordinance №2 of 7 .02.2013 on the conditions and procedures for afforestation of forest areas and agricultural land used for creating special protection and commercial forests and forests in protected areas, inventory created cultures, reporting and registration. Ordinance № 21 of 11.12.2012 on the terms and conditions for determination, approval, registration and cancellation of the sources of forest reproduction base, collection and extraction of forest reproductive material, their grading, trade and import. Ordinance №8 of August 5, 2011 for felling in forests.

7.5	access to information for		Law on access to public information
10.7, 10.8	forest protection and use of chemicals		Forestry Act. Law of Plant Protection. Ordinance № 12 of 16.12.2011 for protection of forest areas from diseases, pests and other damage. Ordinance № 2 of 3.01.2012 on the conditions, methods and procedures for the application of plant protection products in forest areas. Ordinance № 8 of 11.05.2012 on the terms and conditions to protect forest areas from fire. Ordinance № 4 of 15.02.2012 on the procedure for registration of forest nurseries and production of saplings in state nurseries.
10.12.	waste		Law on waste management Forestry Ac Ordinance from 1999 for treatment andd transportation of production waste

Annex 2: Personal Protective Equipment

Personal Protective Equipment (Safety and health in Forestry work, ILO Code of practice, 1998)

Table 1. Non-exhaustive list of personal protective equipment (PPE) appropriate for forestry operations.

The choice of concrete for the Organization PPE should be made taking into account the results of the risk assessment that every employer is required to make in accordance with Art. 16 paragraph 1 pt. 1 of the Health and Safety at Work Act, as well as in compliance with the instructions given by the manufacturer of machines, dangerous substances and preparations.

Parts of the body to be protected	Feet	Legs	Trunk, arms and legs	Hands	Head	Eyes	Eyes/face	Hearing
PPE normally appropriate:	Safety shoes and boots [1]	Safety trousers [2]	Tight-fitting clothes	Gloves	Safety helmet	Goggles	Visor (mesh)	Ear-muffs [3]
Operations								

Planting [4]								
Manual	√			√ [5]				
Mechanized	√		√					√ [6]
Weeding/cleaning								
Smooth-edged tools	√			√		√		
Handsaw	√			√				
Chain-saw	√ [7]	√	√	√ [8]	√	√	√	√
Brush saw								
With metal blade	√	√	√	√	√	√	√	√
With nylon filament	√	√		√		√		√
Rotating knife/flail	√		√	√				√ [6]
Pesticide application	To comply with those specified for the particular substance and application technique							
Pruning *								
Hand tools	√ [9]			√	√ [10]	√		
Logging, cropping and cutting on pieces [11]								
Hand tools	√		√	√ [12]	√			
Chain-saw	√ [7]	√	√	√ [8]	√		√	√
Hand tools	√		√		√			√
Felling								
Hand tools	√			√				
Mechanized	√		√	√		√		√ [6]
Splitting								
Hand tools	√			√		√		
Mechanized	√		√	√		√		√
Extraction								
Manual	√			√	√ [13]			
Chute	√			√	√ [13]			
Animal	√			√	√ [13]			
Mechanized								
skidder	√		√	√ [14]	√			√ [6]
forewarder	√		√		√			√ [6]
cable crane	√		√	√ [14]	√			√ [6]
helicopter	√		√ [15]	√ [14]	√ [16]	√		√
Stacking / loading	√		√	√	√			√ [6]
Chipping	√		√	√	√		√	√ [6]
Tree climbing [17]								
Using a chain-saw [18]	√ [7]	√	√	√ [8]	√ [19]	√	√	√
Not using chain-saw	√				√			

Notes: * If for the pruning is required climbing of trees higher than 3 meters, there must be used protective equipment against falls.

1 With integrated steel toes for medium or high pressure and / or cold-proof

2 Safety pants with pads; in hot weather / climate can be used leggings. Protective pants and leggings that are easily flammable and fusible should not be used for extinguishing fires.

3 Earplugs are generally not suitable for forestry activities because of risk of infection.

4 When planting chemically treated plants and during treatment of plants with chemicals PPE comply with chemical hazards.

5 When planting spiny seedlings or chemically treated plants.

6 When the noise level in the workplace exceeds 85 dB (A).

7 Safety boots with protected front and bowler.

8 Cut-resistant material attached on the rear side of the left hand.

9 Whenever possible injury by falling branches.

10 When pruning on height of over 2.5 meters.

11 Felling includes cross-cutting and removing branches.

12 When using a handsaw.

13 When the drawing of the material happens close to the unstable trees or branches.

14 Only when handling logs; when working with a winch or towing hook.

15 Well visible colors.

16 With chinstrap.

17 regarding the equipment for climbing trees, see Chapter 15 of this Code.(Safety and health in Forestry work, ILO Code of practice, 1998)

18 The use of chain-saws is forbidden for pruning of standing trees at a height greater than the height of the shoulders of the worker and for work in the crowns of standing trees.

19 Helmets for climbing are recommended; if those are not available, safety helmets with chinstraps can be used.

For all the above mentioned forestry activities is required the use of a vest with a signal color and reflective elements. For activities associated with work at height (typically over 1,5 m to the ground), including climbing trees, systems to protect against falls from height (safety belts / harnesses and ropes) are also required. When working outdoors in adverse weather conditions there shall be provided cold-proof clothing and shoes.

Annex 3: Content of a Training Program

The Content of a Training Program is to ensure that all workers contribute to the safe and effective implementation of the planning documentation.

The program should include, but is not limited to the following guidelines consistent with the tasks and responsibilities of workers (including subcontractors):

1. Knowledge and compliance with applicable law (according to Criterion 1.5)

2. Knowledge of the content and specifics of the basic conventions of the ILO (according to Criterion 2.1)
3. To distinguish and report cases of sexual harassment and gender discrimination (according to Criterion 2.2)
4. Safe handling and disposal of hazardous substances in order to avoid health risks (according to Criterion 2.3)
5. Implementation of particularly dangerous activities or those requiring special responsibilities and the requisite equipment / specialized protective clothing (eg. Techniques for felling and hauling, fire protection, etc.). (According to Criterion 2.5)
6. Identification of the places of special cultural, ecological, economic, religious or spiritual interest of local communities and the implementation of conservation measures before commencement of forestry activities in order to avoid negative impact (according to Criterion 4.7)
7. Respecting the legal and customary rights of local communities regarding forest management activities (according to Criterion 4.2)
8. Assessment of the social, economic and environmental impact and development of appropriate measures to limit the negative impacts. (According to Criterion 4.5)
9. Implementation of measures related to the maintenance and / or improvement of ecosystem services related to the safe implementation of these measures (criterion 5.1).
10. Use and storage of pesticides. (According to Criterion 10.7)
11. Applying of urgent measures to neutralize spills or other accidents with chemicals. (According to Criterion 10.12)

Annex 4: Indicative list of interested and affected stakeholders

* This list is not exhaustive and should only serve as a benchmark for the Organization in the performance of indicator 4.1.1

Local governance

Municipal administration

Mayors and deputy mayors of settlements within the Management Unit

State structures

Regional Forest Directorate

State administration on a regional level

Regional Inspectorate of Environment and Water

Basin Directorates

Service "Fire Safety and Population Protection"

Border Police

Bulgarian Academy of Sciences (Forest Research Institute, Institute for Biodiversity and Ecosystem Services, etc.) and other scientific institutions which somehow could be related to the Management Unit

Directorates of national and nature parks

Companies from the forestry sector

Companies engaged in logging and trade of timber

Wood processing enterprises

NGOs

Association of hunters and fishermen – hunting parties

Environmental associations

Travel companies and tourist groups

Caving clubs and clubs for extreme sports

Youth and scouting organizations

Scientific clubs and experts in the field of biodiversity (botanists, zoologists, etc.).

Forest owners

Private owners (companies and individuals)

Municipalities

Religious institutions

The State as a forest owner (Ministry of Agriculture and Food)

Religious communities

Church boards

Mosque boards

Local people

People employed in tourism

People employed in the forestry sector

Collectors of non-timber forest products for trade and personal use

Groups for fire safety

People dependent on firewood

Farmers and beekeepers

Annex 5: Impact Assessment Components

Components of the Assessment of the impact from the activities of the Organization (Impact Assessment)

Regarding the requirements of Indicator 4.5.1 the Impact assessment shall be implemented by engaging the interested and affected stakeholders and shall include but is not limited by the following components:

- Place of the Management Unit in the local development and role of the Organization.
- Scope of the activity of the Organization and spheres of the social impact.
- Identification of the affected and interested stakeholders.
- Cultural specifics of the affected and interested stakeholders that shall be taken into consideration when communicating with them.
- Identification of the rights of local communities (legal and customary) and affected stakeholders regarding the activities of the Organization.
- Current and potential positive and negative impacts from the activities of the Organization incl. social, ecological and economic.
- Measures for overcoming the identified negative impacts.
- Ways to inform and hold consultations with the affected and interested stakeholders as well as for resolving disputes.

- Opportunities for the Organization to support the local social and economic development (according to Criterion 4.4).

Methods for gathering of information for the objectives of the Social assessment:

• consultation meetings;
• interviews (through meetings and phone);
• group discussions;
• document review;
• observations.

Annex 6: Additional requirements for certification of ecosystem services

For the certification of ecosystem services, all other requirements in this Standard continue to apply. Receiving payment, or making claims, for ecosystem services is voluntary. There is overlap between the management and monitoring activities for environmental values and those for ecosystem services. This Annex a describes the requirements and methods for certifying the maintenance of ecosystem services as the basis for promotional claims for improved market access to ecosystem service payments.

I. General requirements

1) A publicly available Ecosystem Services Certification Document is developed and includes:
A declaration of the ecosystem services for which a promotional claim is being or will be made;
A description of the current condition of the declared ecosystem services;
Legal tenure to manage, use and/or receive payments for declared ecosystem services;
Management objectives and verifiable targets related to maintenance and/or enhancement of declared ecosystem services;
Management activities and strategies related to declared ecosystem services;
Areas within and outside of the Management Unit that contribute to the declared ecosystem services;
*Threats** to the declared ecosystem services within and outside of the Management Unit;
A description of management activities to reduce the *threats** to declared ecosystem services within and outside of the Management Unit;
A description of the methodology used to evaluate the impacts of management activities on the declared ecosystem services within and outside of the Management Unit, based on the FSC Procedure for Demonstrating the Impact of Forest Stewardship on Ecosystem Services;
A description of monitoring results related to the implementation of management activities and strategies related to the maintenance and/or enhancement of declared ecosystem services;
A description of results of the evaluation of impacts of activities and *threats** on the declared ecosystem services;
A list of communities and other organizations involved in activities related to the declared ecosystem services; and
A summary of culturally appropriate engagement with local communities and interested stakeholders, related to the declared ecosystem services including ecosystem services access and use, and benefit sharing, consistent with Principle 4.

2) The results of the evaluation of impacts demonstrate that verifiable targets for the maintenance and/or enhancement of the declared ecosystem services are met or exceeded; and

3) The results of the evaluation of impacts demonstrate no negative impacts from management activities on the declared ecosystem services within or outside of the Management Unit.

II. Specific requirements

A. All types of ecosystem services

1) Peatlands are not drained; Wetlands, peatlands, savannahs or natural grasslands are not converted to plantations or any other land use;

2) Areas converted from wetlands, peatlands, savannahs or natural grasslands to plantation since November 1994 are not certified, except where:

The Organization provides clear and sufficient evidence that it was not directly or indirectly responsible for the conversion; or

The conversion is producing clear, substantial, additional, secure, long-term conservation benefits in the Management Unit; and

The total area of plantation on sites converted since November 1994 is less than 5% of the total area of the Management Unit.

3) Knowledgeable experts independent of The Organization* confirm the effectiveness of management strategies and actions to maintain and/or enhance the identified High Conservation Value* areas.

B. Carbon Sequestration and Storage

1) Forest are identified to be protected due to their carbon stocks, according to the FSC Guidance for Maintaining and Enhancing Ecosystem Services.

2) Management activities maintain, enhance or restore carbon storage in the forest, including through reduced impact logging practices for carbon

C. Biological Diversity Conservation

1) Management activities maintain, enhance or restore:

Rare and threatened species and their habitats, including through the provision of conservation zones, protection areas, connectivity, and other direct means for their survival and viability;

Natural landscape-level characteristics, including forest diversity, composition and structure.

2) The territories which are managed with main objective biodiversity conservation and protection of environmental value of ecosystems:

Represent the full range of environmental values in the Management Unit;

Have sufficient size or functional connectivity, to support natural processes;

Contain the full range of habitats present for focal species and rare and threatened species;

Have sufficient size or functional connectivity with other suitable habitat to support viable populations of focal species including rare and threatened species in the region.

3) Knowledgeable experts independent of the Organization confirm the sufficiency of the territories which are managed with main objective biodiversity conservation and protection of environmental value of ecosystems.

D. Protection of water catchments and sources of drinking water

1) An assessment is made that identifies:

Hydrological features and connections, including permanent and temporary water bodies, watercourses, and aquifers;

Domestic water needs for local communities within and outside of the Management Unit that may be impacted by management activities;

Areas of water stress and water scarcity;

Consumption of water by The Organization and other users.

2) Measures are implemented to maintain, enhance or restore permanent and temporary water bodies, watercourses, and aquifers;

3) Chemicals, waste and sediment are not discharged into water bodies, watercourses or aquifers;

4) Management activities and strategies respect universal access to water, as defined in the UN resolution on the human right to water and sanitation.

E. Soil Conservation

1) Vulnerable or high risk soils are identified, including thin soils, soils with poor drainage and subject to water logging, and soils prone to compaction, erosion, instability and run-off;

2) Measures are implemented to reduce compaction, erosion and landslides;

3) Management activities maintain, enhance or restore soil fertility and stability; and

4) Chemicals and waste are not discharged into soil.

F. Recreation

Note: The requirements of the National FSC Standard including the current additional requirements are obligatory also for third parties that offer recreational services on the territory of the Management Unit in case these services are promoted through the FSC certification.

1) Measures are implemented to maintain, enhance or restore:

Areas of importance for recreation and tourism including site attractions, archaeological sites, trails, areas of high visual quality and areas of cultural or historical interest; and

Populations of species that are a tourist attraction.

2) The rights, customs and culture of local communities are not violated by tourism activities;

3) Health and safety practices are implemented to protect the health and safety of tourism customers;

4) Health and safety plans and accident rates are publicly available in recreational areas and areas of interest to the tourism sector; and

5) Goods and services (including local crafts) related to local cultural characteristics are preferred to more widespread alternatives.

6) A summary is provided of activities that demonstrate prevention of discrimination based on gender, age, ethnicity, religion, sexual orientation or disability.

Annex 7: Monitoring of the implementation of the Planning documentation

Monitoring of the implementation of the Planning documentation, the impact of management activities over the environment and social sphere, and changes in the environment. Deadlines for revision of planning documentation regarding the results of periodic monitoring

* Monitoring is not limited to the requirements of this annex

Elements of the Planning documentation **Note:** There will be differences depending on the scale, intensity and risk as well as on the authorization	**Monitored object** (partial list)	**Frequency of monitoring**	**Who monitors this site?** **Note:** There will be differences depending on the scale, intensity and risk as well as on the authorization	**Frequency of the update of Planning documentation**
Financial plan	Implementation of the financial plan Incomes / Expenses	On every three months	Chief financial officer / accountant	Annually
Social agreements	Implementation of social agreements between employers and employees	Yearly	A representative of the employees / union leader	Pursuant to the requirements of relevant labor laws When changing working conditions
	Complaints from employees	Yearly	A representative of the employees / union leader	If necessary
Plan / program for training and qualification of the personnel	Professional qualification* of staff Implementation of the plan / program for training and qualification	Yearly or as stipulated in the plan/program for training and qualification of the personnel	Management staff	Annually

Healthy and safe working conditions incl. for the workers of the subcontractors	Availability and use of personal protective equipment and special clothing	Current	Staff responsible for the safety of the personnel of the Organization; Operational staff for the workers of the subcontractors	If necessary
	Observance of the techniques and requirements for work safety	Current	Staff responsible for the safety of the personnel of the Organization; Operational staff for the workers of the subcontractors	If necessary
	Occupational accidents	Current	Staff responsible for the safety	If necessary
Engagement of the interested stakeholders	Engagement of the affected and interested stakeholders in the planning of the activities	Yearly	Operational staff, external experts	Annually and if necessary
Illegal activities in the forests	Reports and evidence of illegal logging and other illegal practices Complaints Feedback	Current	Management and operational staff Legal advisor, External experts (NGOs, etc.).	If necessary
Forest management plan		On every 10 years with a supervision on the 5th year	Management personnel, owners, etc.	On every 10 years with a supervision on the 5th year
Changes in the borders, ownership,	Borders of the Management Unit Change of	Current Yearly	Management personnel, owners, etc.	If necessary

functionality and land use of the territories within the Management Unit	ownership (restitution) Change of land use Announcement of new protected areas			
Health condition of the forest	Diseases and pests	Current Yearly	Operational staff, external experts	If necessary
Use / yields and forest management activities	Annual yields of timber and non-timber products	Yearly	Management staff	Annually or if necessary
	Area of regeneration fellings and thinnings	Yearly	Management staff	Annually or if necessary
	Afforestation	Yearly	Operational staff, external experts	Annually or if necessary
	Construction and maintenance of forest roads and installations	Yearly	Management staff	Annually or if necessary
	Usage of fertilizers and pesticides	Yearly	Management staff, Operational staff, external experts	Annually or if necessary
HCV forests	Identified HCV forests on the territory of the Management Unit	Yearly	Operational staff, external experts	Annually or if necessary
Representative sample areas of natural forest	Health, dynamics of structure and composition,	Yearly	Operational staff, external experts	Annually or if necessary

ecosystems	succession processes, negative trends			
Ecosystem services *(in case the Organization promotes through FSC the maintenance and enhancement of ecosystem services)*	Promoted ecosystem services	Yearly	Management and operational staff, external experts	Annually or if necessary
Impact of management activities on the environment	Regeneration processes in different silvicultural systems	Yearly	Operational staff,	If necessary
	Availability and distribution of invasive species	Yearly	Operational staff, external experts	If necessary
	Rare and endangered habitats	Yearly	Operational staff, external experts	Annually or if necessary
	Populations of rare and endangered species	Yearly	Operational staff, external experts	Annually or if necessary
	Negative impacts from the use of biological agents, pesticides and fertilizers	Yearly	Operational staff, external experts	Annually or if necessary
	Frequency, distribution and	Yearly	Operational staff, external experts	If necessary

	extent of damage caused by natural disasters resulting from forestry activities			
	Negative impacts on water resources	Yearly	Operational staff	Annually or if necessary
	Negative impacts on the soil (erosion, compaction, pollution, etc.)	Yearly	Operational staff	Annually or if necessary
	Condition of permanent and temporary forest roads	At field visits and annually	Operational staff	Annually or if necessary
	Presence of waste in forest areas	At field visits and annually	Operational staff	Annually or if necessary
Impact of management activities on the social sphere	Impacts on the rights and property of local affected and interested parties	Yearly	Management staff	If necessary
	Management of complaints and signals	Current	Management staff	If necessary
	Impacts on drinking water sources and other uses of water	Yearly	Management and operational staff,	If necessary

	resources			
	Use of wood and non-wood products from local companies	Yearly	Management staff	If necessary
	Supply wood to the local people	Yearly	Management and operational staff	Annually
	Places of cultural, historical, economic environmental, religious and spiritual significance for local communities	Yearly	Operational staff, external experts (sociologist, historian, cultural expert, etc..)	If necessary
Changes in the environment	Rare and endangered habitats	Yearly	Operational staff, external experts	Annually or if necessary
	Populations of rare and endangered species	Yearly	Operational staff, external experts	Annually or if necessary
	Protected territories and zones	Yearly	Operational staff, external experts	Annually or if necessary
	Large natural disturbances	Yearly		If necessary

Annex 8: List of invasive species

List of invasive and potentially invasive alien tree and bush species in Bulgaria

The list of species that must not be used for afforestation in FSC certified units is aligned with the National report for the condition and protection of the environment of the Republic of Bulgaria from 2010 (edition 2012) that is available at: *http://eea.government.bg/bg/soer/2010/biodiversity-nem/biologichno-raznoobrazie-natsionalna-ekologichna-mrezha-1*

№	**Species**	**Invasive status**
1	*!Acer negundo*	Invasive
2	*!Ailanthus altissima*	Invasive
3	*!Amorpha fruticosa*	Invasive
4	*Broussonettia papyrifera*	Potentially invasive
5	*Elaeagnus angustifolia*	Invasive
6	*Koelreuteria paniculata*	Potentially invasive
7	*Lycium barbarum*	Potentially invasive
8	*Fraxinus pennsylvanica*	Invasive
9	*Fraxinus americana*	Invasive
9	***!**Robinia pseudacacia*	Invasive

With the "**!**" symbol are marked the species that are included in the *List of most dangerous invasive alien species that threaten the biodiversity of Europe*.

Annex 9: FSC List of 'highly hazardous' pesticides

The following is based on the FSC List of 'highly hazardous' pesticides FSC-STD-30-001a EN - version from February 2015.

* For more detailed and up-to-date information, please, see the latest published version of: FSC List of 'highly hazardous' pesticides FSC-STD-30-001a EN

Id	**CAS Number**	**Pesticide active ingredient**

1	542–75–6	1,3-dichloropropene
2	94–75–7	2,4-D
3	94–82–6	2,4-DB
4	133–32–4	4-indol-3-ylbutyric acid
5	71751–41–2	abamectin
6	30560–19–1	acephate
7	57960–19–7	acequinocyl
8	135410–20–7	acetamiprid
9	34256–82–1	acetochlor
10	101007–06–1	acrinathrin
11	107–02–8	acrolein
12	15972–60–8	alachlor
13	116–06–3	aldicarb
14	96–24–2	alpha-chlorohydrin
15	67375–30–8	alpha-cypermethrin
16	20859–73–8	aluminium phosphide
17	834–12–8	ametryn
18	348635–87–0	amisulbrom
19	33089–61–1	amitraz
20	61–82–5	amitrole
21	84–65–1	anthraquinone
22	Group *	Arsen and its coumpounds
23	1912–24–9	atrazine
24	60207–31–0	azaconazole
25	68049–83–2	azafenidin
26	35575–96–3	azamethiphos
27	2642–71–9	azinphos-ethyl
28	86–50–0	azinphos-methyl
29	41083–11–8	azocyclotin
30	22781–23–3	bendiocarb
31	82560–54–1	benfuracarb
32	17804–35–2	benomyl
33	177406–68–7	benthiavalicarb-isopropyl
34	68359–37–5b	beta-cyfluthrin; cyfluthrin
35	65731–84–2	beta-cypermethrin
36	608–73–1	BHC mixed isomers
37	82657–04–3	bifenthrin
38	584–79–2	bioallethrin

39	28434–01–7	bioresmethrin
40	1330–43–4	Borax; disodium tetraborate
41	10043–35–3	Boric acid
42	56073–10–0	brodifacoum
43	28772–56–7	bromadiolone
44	63333–35–7	bromethalin
45	1689–84–5	bromoxynil
46	1689–99–2	bromoxynil octanate
47	3861–41–4	bromoxynil-butyrate
48	56634–95–8	bromoxynil-heptanoate
49	2961–68–4	bromoxynil-potassium
50	52–51–7	bronopol
51	23184–66–9	butachlor
52	34681–10–2	butocarboxim
53	34681–23–7	butoxycarboxim
54	Group *	Cadmium and its compounds
55	95465–99–9	cadusafos
56	592–01–8	Calcium cyanide
57	1305–99–3	calcium phosphide
58	2425–06–1	captafol
59	133–06–2	captan
60	63–25–2	carbaryl
61	10605–21–7	carbendazim
62	1563–66–2	carbofuran
63	55285–14–8	carbosulfan
64	15263–52–2	cartap; cartap hydrochloride
65	2439–01–2	chinomethionat
66	15879–93–3	chloralose
67	500008–45–7	chlorantraniliprole
68	57–74–9	chlordane
69	54593–83–8	chlorethoxyfos
70	122453–73–0	chlorfenapyr
71	470–90–6	chlorfenvinphos
72	71422–67–8	chlorfluazuron
73	24934–91–6	chlormephos
74	79–11–8	chloroacetic acid
75	3691–35–8	chlorophacinone
76	76–06–2	chloropicrin

77	1897–45–6	chlorothalonil
78	15545–48–9	chlorotoluron
79	2921–88–2	chlorpyrifos
80	5598–13–0	chlorpyrifos-methyl
81	67–97–0	cholecalciferol
82	74115–24–5	clofentezine
83	65996–82–9	coal tar oils; CAS 8002 29 7
84	1332–40–7	copper oxychloride
85	1333–22–8	copper sulfate (tribasic); copper hydroxide sulfate
86	20427–59–2	copper(II) hydroxide; cupric hydroxide
87	56–72–4	coumaphos
88	5836–29–3	coumatetralyl
89	1333–22–8	cupric sulfate-tricupric hydroxide
90	1317–39–1	cuprous oxide
91	21725–46–2	cyanazine
92	560121–52–0	cyenopyrafen
93	180409–60–3	cyflufenamid
94	68359–37–5	cyfluthrin
95	68085–85–8	cyhalothrin
96	13121-70-5	cyhexatin
97	52315–07–8	cypermethrin
98	39515–40–7	cyphenothrin
99	94361–06–5	cyproconazole
100	121552–61–2	cyprodinil
101	1596–84–5	daminozide
102	50–29–3	DDT
103	52918–63–5	deltamethrin
104	919–86–8	demeton-S-methyl
105	80060–09–9	diafenthiuron
106	333–41–5	diazinon
107	1085–98–9	dichlofluanid
108	62–73–7	dichlorvos; DDVP
109	51338–27–3	diclofop-methyl
110	141–66–2	dicrotophos
111	56073–07–5	difenacoum

112	104653–34–1	difethialone
113	35367–38–5	diflubenzuron
114	130339–07–0	diflumetorim
115	22936–75–0	dimethametryn
116	60–51–5	dimethoate
117	624–92–0	dimethyl disulfide
118	2274–67–1	dimethylvinphos
119	149961–52–4	dimoxystrobin
120	973–21–7	dinobuton
121	39300–45–3	dinocap
122	1420–07–1	dinoterb
123	82–66–6	diphacinone
124	85–00–7	diquat dibromide
125	298–04–4	disulfoton
126	330–54–1	diuron
127	Group	DNOC and its salts
128	03.10.2439	dodine
129	106–93–4	EDB; ethylene dibromide
130	17109–49–8	edifenphos
131	155569–91–8	emamectin benzoate
132	54406–48–3	empenthrin
133	115–29–7	endosulfan
134	145–73–3	endothal
135	2164–07–0	endothal-dipotassium
136	2104–64–5	EPN
137	133855–98–8	epoxiconazole
138	50–14–6	ergocalciferol
139	66230–04–4	esfenvalerate
140	29973–13–5	ethiofencarb
141	563–12–2	ethion
142	13194–48–4	ethoprophos
143	56–38–2	ethyl-parathion
144	80844–07–1	etofenprox
145	153233–91–1	etoxazole
146	2593–15–9	etridiazole
147	131807–57–3	famoxadone
148	52–85–7	famphur (ESA)
149	22224–92–6	fenamiphos

150	60168–88–9	fenarimol
151	120928–09–8	fenazaquin
152	13356–08–6	fenbutatin oxide
153	122–14–5	fenitrothion
154	3766–81–2	fenobucarb
155	72490–01–8	fenoxycarb
156	39515–41–8	fenpropathrin
157	134098–61–6	fenpyroximate
158	55–38–9	fenthion
159	668–34–8	fentin
160	900–95–8	fentin acetate
161	76–87–9	fentin hydroxide
162	51630–58–1	fenvalerate
163	120068–37–3	fipronil
164	90035–08–8	flocoumafen
165	69806–50–4	fluazifop-butyl
166	79622–59–6	fluazinam
167	33245–39–5	fluchloralin
168	70124–77–5	flucythrinate
169	101463–69–8	flufenoxuron
170	103361–09–7	flumioxazin
171	658066–35–4	fluopyram
172	640–19–7	fluoroacetamide
173	136426–54–5	fluquinconazole
174	85509–19–9	flusilazole
175	106917–52–6	flusulfamide
176	117337–19–6	fluthiacet
177	68157–60–8	forchlorfenuron
178	50–00–0	formaldehyde
179	22259–30–9	formetanate
180	23422–53–9	formetanate hydrochloride
181	98886–44–3	fosthiazate
182	65907–30–4	furathiocarb
183	98–01–1	furfural
184	76703–62–3	gamma-cyhalothrin
185	77182–82–2	glufosinate-ammonium

186	108173–90–6	guazatine
187	111872–58–3	halfenprox
188	69806–40–2	haloxyfop-methyl
189	23560–59–0	heptenophos
190	118–74–1	hexachlorobenzene
191	86479–06–3	hexaflumuron
192	78587–05–0	hexythiazox
193	74–90–8	hydrogen cyanide
194	35554–44–0	imazalil
195	140163–89–9	imicyafos
196	138261–41–3	imidacloprid
197	57520–17–9	iminoctadine triacetate
198	72963–72–5	imiprothrin
199	173584–44–6	indoxacarb
200	74–88–4	iodomethane
201	1689–83–4	ioxynil
202	3861–47–0	ioxynil octanoate
203	2961–62–8	ioxynil-sodium
204	36734–19–7	iprodione
205	140923–17–7	iprovalicarb
206	24353–61–5	isocarbophos
207	99675–03–3	isofenphos-methyl
208	2631–40–5	isoprocarb
209	881685–58–1	isopyrazam
210	141112–29–0	isoxaflutole
211	18854–01–8	isoxathion
212	58769–20–3	kadethrine
213	143390–89–0	kresoxim-methyl
214	91465–08–6	lambda-cyhalothrin
215	58–89–9	lindane; gamma-HCH
216	Group *	Lead and its compounds
217	330–55–2	linuron
218	103055–07–8	lufenuron
219	12057–74–8	magnesium phosphide
220	121–75–5	malathion
221	8018–01–7	mancozeb
222	12427–38–2	maneb
223	2595–54–2	mecarbam

224	110235–47–7	mepanipyrim
225	131–72–6	meptyldinocap
226	Group *	Mercury and its compounds
227	108–62–3	metaldehyde
228	137–42–8	metam sodium
229	10265–92–6	methamidophos
230	950–37–8	methidathion
231	2032–65–7	methiocarb
232	16752–77–5	methomyl
233	72–43–5	methoxychlor
234	74–83–9	methyl bromide
235	556–61–6	methyl isothiocyanate
236	9006–42–2	metiram
237	240494–70–6	metofluthrin
238	21087–64–9	metribuzin
239	7786–34–7	mevinphos
240	51596–10–2	milbemectin
241	Group *	Mineral oils; paraffin oils cont. > 3 % DMSO (Dimethyl sulphoxide)
242	2212–67–1	molinate
243	6923–22–4	monocrotophos
244	142-59-6	nabam
245	300–76–5	naled
246	54–11–5	nicotine
247	1929–82–4	nitrapyrin
248	116714–46–6	novaluron
249	121451–02–3	noviflumuron
250	1113–02–6	omethoate
251	19044–88–3	oryzalin
252	19666–30–9	oxadiazon
253	23135–22–0	oxamyl
254	301–12–2	oxydemeton-methyl
255	42874–03–3	oxyfluorfen
256	1910–42–5	paraquat dichloride
257	298–00–0	parathion-methyl

258	87–86–5	PCP; pentachlorophenol
259	52645–53–1	permethrin
260	26002–80–2	phenothrin
261	2597–03–7	phenthoate
262	298–02–2	phorate
263	2310–17–0	phosalone
264	732–11–6	phosmet
265	13171–21–6	phosphamidon
266	14816–18–3	phoxim
267	1918–02–1	picloram
268	117428–22–5	picoxystrobin
269	83–26–1	pindone
270	24151–93–7	piperophos
271	23103–98–2	pirimicarb
272	29232–93–7	pirimiphos-methyl
273	23031–36–9	prallethrin
274	32809–16–8	procymidone
275	41198–08–7	profenofos
276	139001–49–3	profoxydim
277	1918–16–7	propachlor
278	709–98–8	propanil
279	2312–35–8	propargite
280	31218–83–4	propetamphos
281	114–26–1	propoxur
282	23950–58–5	propyzamide; pronamide
283	34643–46–4	prothiofos
284	123312–89–0	pymetrozine
285	77458–01–6	pyraclofos
286	175013–18–0	pyraclostrobin
287	129630–19–9	pyraflufen
288	6814–58–0	pyrazachlor
289	13457–18–6	pyrazophos
290	8003–34–7	pyrethrins (pyrethrum)
291	96489–71–3	pyridaben
292	119–12–0	pyridaphenthion
293	504–24–5	pyridin-4-amine

294	337458–27–2	pyrifluquinazon
295	135186–78–6	pyriftalid
296	105779–78–0	pyrimidifen
297	13593–03–8	quinalphos
298	82-68-8	quintozene, PCNB
299	119738–06–6	quizalofop-P-tefuryl
300	10453–86–8	resmethrin
301	83–79–4	rotenone
302	127–90–2	S421
303	874967–67–6	sedaxane
304	105024–66–6	silafluofen
305	143–33–9	sodium cyanide
306	62–74–8	sodium fluoroacetate (1080)
307	148477–71–8	spirodiclofen
308	283594–90–1	spiromesifen
309	57–24–9	strychnine
310	4151–50–2	sulfluramid
311	3689–24–5	sulfotep
312	2699–79–8	sulfuryl fluoride
313	102851–06–9	tau-fluvalinate
314	21564–17–0	TCMTB; 2-(thiocyanatomethylthio) benzothiazole
315	119168–77–3	tebufenpyrad
316	96182–53–5	tebupirimfos
317	83121–18–0	teflubenzuron
318	79538–32–2	tefluthrin
319	3383-96-8	temephos
320	149979–41–9	tepraloxydim
321	13071–79–9	terbufos
322	33693–04–8	terbumeton
323	886–50–0	terbutryn
324	22248–79–9	tetrachlorvinphos
325	112281–77–3	tetraconazole
326	7696–12–0	tetramethrin
327	71697–59–1	theta-cypermethrin

328	111988–49–9	thiacloprid
329	31895–21–3	thiocyclam
330	59669–26–0	thiodicarb
331	39196–18–4	thiofanox
332	640–15–3	thiometon
333	23564–05–8	thiophanate-methyl
334	29547–00–0	thiosultap monosodium
335	137–26–8	thiram
336	129558–76–5	tolfenpyrad
337	731–27–1	tolylfluanid
338	66841–25–6	tralomethrin
339	118712–89–3	transfluthrin
340	112143–82–5	triazamate
341	24017–47–8	triazophos
342	72459–58–6	triazoxide
343	78–48–8	tribufos
344	52–68–6	trichlorfon
345	141517–21–7	trifloxystrobin
346	64628–44–0	triflumuron
347	1582–09–8	trifluralin
348	2275–23–2	vamidothion
349	50471–44–8	vinclozolin
350	81–81–2	warfarin
351	2655–14–3	XMC
352	52315–07–8z	zeta-cypermethrin
353	1314–84–7	zinc phosphide
354	12122–67–7	zineb
355	137–30–4	ziram
356	160791–64–0	ZXI 8901

* **Groups**

Arsen and its compounds

Id	CAS Number	Pesticide active ingredient
357	1303-28-2	Arsenic pentoxide
358	75-60-5	Cacodylic acid; dimethylarsinic acid
359	2163-80-6	MSMA
360	13464-38-5	Sodium arsenate
361	124-65-2	Cacolydate; sodium dimethylarsinate
362	75-60-5	Chromated copper arsenate; CCA
363	1327-53-3	Arsenic trioxide
364	7778-44-1	Calcium arsenate
365	10103-61-4	Copper arsenate
366	7784-40-9	Lead arsenate
367	7784-46-5	Sodium arsenite

Cadmium and its compounds

Id	CAS Number	Pesticide active ingredient
368	1306-23-6	Cadmium sulfide

DNOC and its salts

Id	CAS Number	Pesticide active ingredient
369	2980-64-5	DNOC, ammonium salt
370	5787-96-2	DNOC, potassium salt
371	2312-76-7	DNOC, sodium salt
372	534-52-1	DNOC

Lead and its compounds

Id	CAS Number	Pesticide active ingredient
373	7784-40-9	Lead arsenate

Mercury and its compounds

Id	CAS Number	Pesticide active ingredient
374	7487-94-7	Mercuric chloride
375	21908-53-2	Mercuric oxide
376	1319-86-4	Chloromethoxypropylmercuric acetate; CPMA
377	27236-65-3	Diphenylmercurydodecenylsuccinate; PMDS
378	104-68-9	Phenylmercuric oleate; PMO
379	62-38-4	Phenylmercury acetate; PMA

Mineral oils; paraffin oils cont. > 3 % DMSO (Dimethyl sulphoxide)

Id	CAS Number	Pesticide active ingredient
380	64741-88-4	Mineral oils, paraffin oils

381	64741-89-5	Mineral oils, paraffin oils
382	64741-97-5	Mineral oils, paraffin oils
383	64742-46-7	Mineral oils, paraffin oils
384	64742-54-7	Mineral oils, paraffin oils
385	64742-55-8	Mineral oils, paraffin oils
386	64742-65-0	Mineral oils, paraffin oils
387	72623-86-0	Mineral oils, paraffin oils
389	97862-82-3	Mineral oils, paraffin oils

Annex 10: Safety and health in the use of agrochemicals

The following is section 2.3. "Safe handling and use" of ILO document "Safety and health in the use of agrochemicals – A gude"

Safe handling and use

This major section deals with packaging, transport, transfer, storage, dispensing, pesticide application, other agrochemical applications, spillage and disposal of containers and waste. As pesticide application is a major activity in the use of agrochemicals and also the most hazardous, precautions to be taken before, during and after application are treated separately. Storage, management of spills and disposal are also hazardous operations. Precautions to be taken, both for the safety of users as well as the general public and the environment, are described

Reference is also made to a series of FAO guidelines that are relevant to this section. These include:

– Guidelines for the packaging and storage of pesticides (Rome, 1985);

– Guidelines for the disposal of waste pesticide and pesticide containers on the farm (Rome, 1985);

– Guidelines on good practice for ground and aerial application of pesticides (Rome, 1988).

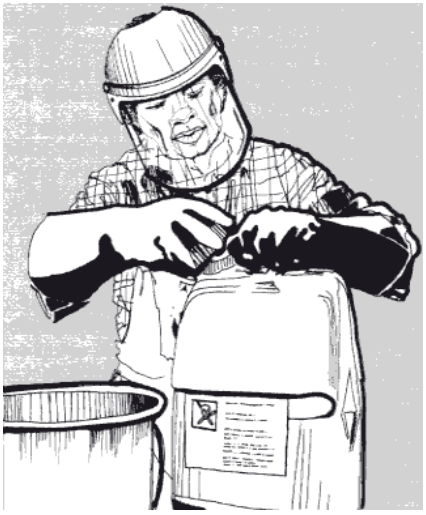
2.3.1. Packaging

Agrochemicals are usually supplied in packages (There are exceptions. Some fertilizers such as lime, ground rock phosphate or basic slag may be delivered in bulk by lorry.) These may vary greatly in size, from a small bottle or box to a large metal or plastic drum. Packages are made of glass, metal, plastic or paper. In some cases they are subject to high internal pressures. Liquefied gases such as methyl bromide or anhydrous ammonia could evaporate inside the container to exert pressures on its walls. Packages need to be resistant to these pressures or the corrosive action of chemicals.

Agrochemical users should know that each package must comply with the national standards and regulations that apply to the packaging of agrochemicals. Such regulations may not exist in some countries. Therefore, users should be aware of general requirements for packaging.

This information will be useful to identify properly packaged agrochemicals during purchase. Improperly packaged products could cause health risks.

Figure 9. Opening a correctly designed container



An agrochemical package should be so designed and constructed that:

– the contents cannot escape during handling, storage, stacking, loading and unloading;

– the contents will not deteriorate or be spoilt;

– the materials from which it is made, including fastenings such as lids, do not react with the contents to form other compounds;

– all parts of it are well made and will not be adversely affected by changes in atmospheric conditions such as pressure, temperature and humidity;

– it is provided with a seal which is destroyed on opening for the first time, and has a fastening device so designed that it can be repeatedly refastened by the user (figure 9);

– it is labelled or marked.

Users should clearly understand that packaging and repackaging of agrochemicals is beyond their competence unless they have been trained to do so. Further, they should never attempt to repackage any agrochemical in a container not meant for it. Even if it had contained the same pesticide, there is a risk, for example, that the package may be damaged or the lid may not fasten properly. Users run a risk of contamination with toxic substances by even trying to examine whether a container is fit for reuse.

2.3.2. Transport

Manufacturers, exporters and importers of agrochemicals should comply with international transportation and safety regulations. They might also have to comply with national regulations. Agrochemical users should be aware that such regulations exist. They are also concerned with transport, which may be from suppliers to farm or from store to field. Safe transport should ensure that:

– only products in good-quality containers are accepted from the supplier; those which are damaged or leaking should be refused;

– any vehicle transporting a product will not damage the container. Sharp edges on vehicle sides or nails which have worked upwards from floorboards should be hammered down or otherwise removed;

– a package or container is handled in a manner to avoid unnecessary collisions or violent falls. These may burst or weaken the container to cause spillage of its contents;

– any information provided with the agrochemicals such as labelling, accompanying information or data sheets is transported with it;

– random stacking is avoided during transport; for example, containers of liquid products should be transported top-side up and not be subjected to pressure by excessive loads which may cause them to burst;

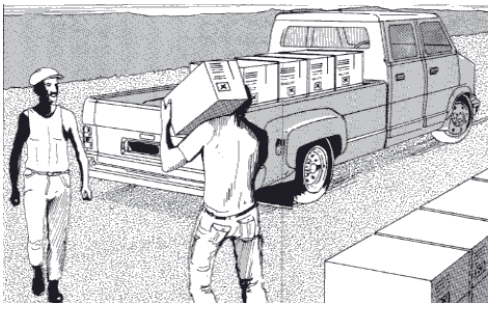
– agrochemicals are isolated from other materials transported on the same vehicle;

– paper, cardboard or water-soluble packages are protected from rain or bad weather by a vehicle roof or waterproof covering;

– agrochemicals are not carried alongside the driver in either a vehicle or a tractor cab

– drivers take extra care. They should be competent to take suitable precautions in the event of a collision or other emergency. This may involve containing spillage wherever possible and avoiding contamination of anyone providing assistance.

Figure 10. Loading pesticides on to a lorry



2.3.3. Transfer

Only in very exceptional cases should agrochemical products be transferred from one container to another. The practice has many disadvantages including the possibility that an agrochemical may mistakenly be consumed as a soft drink; this has caused fatalities in several countries. That is why the practice is banned in many countries.

Where in exceptional circumstances it is necessary to transfer agrochemicals from one container to another, the receiving container should be:

– wherever possible, the agrochemical manufacturer's container which has previously held the same product and been tested by a competent person as fit for reuse;

– of the same quality as the original container;

– properly labelled or marked;
– completely clean and empty;
– not overfilled with a liquid so as to cause spillage when pouring or due to expansion in volume by rise in temperature.

Precautionary measures should be observed when agrochemicals are transferred. Particular attention should be paid to protective clothing, removal of spillage, personal hygiene and the avoidance of contamination of any foodstuffs.

2.3.4. Storage

Agrochemicals are usually delivered to a store by the supplier or transported by the user. They are also returned to the store after partial use at the farm. During storage they are most vulnerable to theft, vandalism, accidental or deliberate misuse or the effects of extreme weather conditions. Users who have to store agrochemicals should know how to construct and maintain a place for storage, thereby ensuring their own safety and that of others. They should also take necessary action to prevent the pollution of the environment.

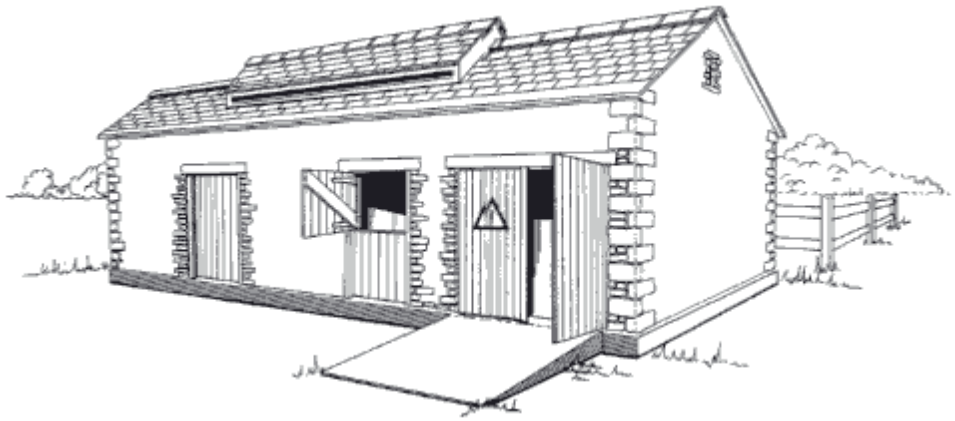
In general, safe and secure storage should ensure correct siting to allow easy access for the delivery of agrochemicals and transfer to farm vehicles. If the store is within a general-purpose building it should be separated from other stocks such as flammable materials. The location of the store should also take account of possible pollution risks from leaks and spillages. It should be situated away from living accommodation and surface waters such as rivers, streams and reservoirs used for the supply of drinking or irrigation water. Figure 11 shows an agrochemical store.

Stores should not be located:

– in areas liable to flooding or with a potential for the pollution of underground water supply sources such as wells and boreholes; or
– in upstream catchment areas for water supply or
– in environmentally sensitive areas;

There should be adequate capacity for storing the maximum amount of agrochemicals and provision for secure stacking and easy access.

Figure 11. A correctly designed agrochemical store



Users should also ensure that any building used to store agrochemicals:

– is of sound construction, resistant to fire, extremes of temperature and chemical action, and impervious to liquids. Floors should be so designed as to contain spillage or leakage and have a non-slip surface which can be easily cleaned. External walls should give at least 30 minutes' fire resistance and all walls should be impervious to water, their inside surfaces smooth, easily washable and free from dust traps. If a store is of single-storey construction, the roof should be of non-combustible material which will fall in quickly and act as a vent in the case of fire;

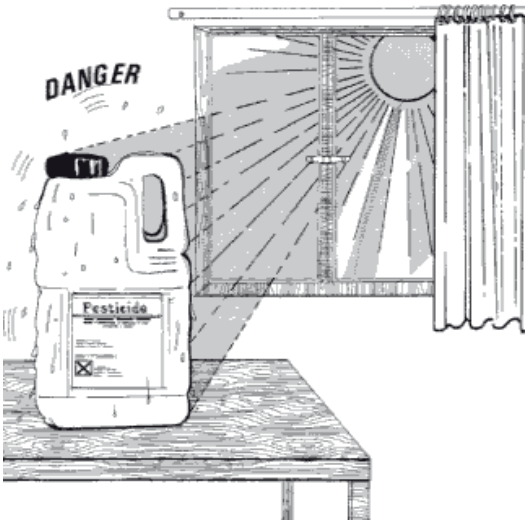
– has suitable entrances and exits with fire-resistant doors opening outwards wherever possible. Doorways should be of adequate size to allow the safe movement of materials, and interior doors should be of the swing-door type. Where stores are constructed within a general purpose building, it is preferable that access doors open directly on to the outside of that building. Where this is not possible, access should not be shared with areas used for domestic purposes, storage of foodstuffs or keeping animals;

– could contain spillage and leakage in order to protect the external environment. In circumstances where environmental conditions are particularly sensitive, it may be necessary to construct an internal drainage system connected to a containment tank or to an encircling wall (bunding) with the capacity to hold all the agrochemicals in store;

– is kept dry and is resistant to extremes of temperature. In very hot or freezing conditions most agrochemicals would deteriorate and could even damage the containers. Similarly, dampness will weaken paper sacks, possibly resulting in spillage of the contents. The growing practice of supplying pesticides in water-soluble sachets makes it particularly important that they are stored in absolutely dry conditions;

– has adequate natural or artificial light by the provision of sufficient window area or artificial (e.g. electric) lighting. Windows should not allow direct sunlight to fall on to agrochemicals because ultra- violet light may cause deterioration of containers and contents (figure 12).

Figure 12. Avoid exposing agrochemical containers to direct sunlight



This could be avoided by shading windows or, if building a new store, by positioning windows. Electric lights and switches should be positioned so as to avoid mechanical damage and there should be an adequate separation distance between lamps and stored agrochemicals to avoid the transmission of heat;

– is properly ventilated to remove stale or contaminated air. This may be achieved by the provision of "air bricks". Where adequate natural ventilation cannot be provided, an extractor fan should be installed. In all circumstances the removal of air should be to a point on an external wall of the building of which the agrochemical store is a part;

– is suitably marked with a warning sign (figure 13) and secured against theft. Any warning sign should conform to national requirements in respect of colour, pictorial symbol and geometrical shape. If national regulations have not been specified, the skull and crossbones is generally acceptable. The security of the store is important in preventing theft or misuse of contents by unauthorised people (figure 14). The extent of security should be adequate in all foreseeable circumstances;

– is well organised so that on delivery agrochemicals can be promptly stored and properly shelved and stacked in a secure and orderly way with clearly visible labels. Flammable products should be segregated by placing them in an isolated and particularly fire-resistant part of the store. Oxidising products and fumigants should, additionally, be stored in absolutely dry conditions. In any storage arrangement, care should be taken to avoid overloading shelving or compressing containers at the bottom of a stack.

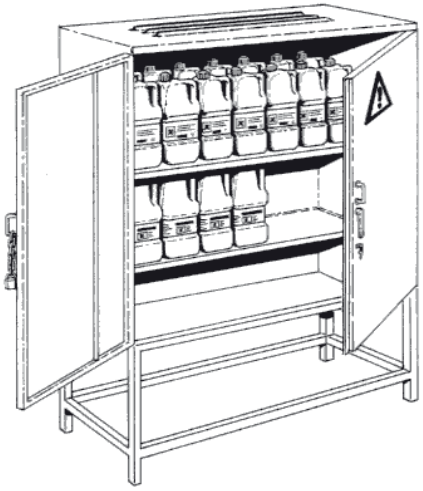
Figure 13. Warning! Pesticide storage! No access to unauthorised persons!

Other considerations:

– water supply. A water supply should be provided nearby but not in the store. Any water supply used to fill sprayer tanks or animal treatment baths should be so designed as to avoid back siphonage;

– records. A record should be made of agrochemicals in store but kept separately in a safe place, so that there could be easy access to it in the event of an emergency such as fire or unauthorised use;

Figure 14. Agrochemicals should be stored under lock and key



– first aid. Adequate first-aid facilities should be available to treat minor injuries and contamination of eyes and skin;

– fire precautions. Smoking and the use of a naked flame should be prohibited within the store. A suitable fire extinguisher in good working order should be at hand, in case of emergencies;

– washing facilities. Washing facilities should be provided close to the store for anyone who handles agrochemicals. They should be equipped with a wash-basin and clean running water, soap and towel (disposable towels are best if these are available);

– protective-clothing accommodation. Separate ventilated accommodation must be provided for protective clothing and for personal clothing. This accommodation, which is generally in the form of a cupboard or locker, must not be within the agrochemical storage area;

– storage for empty containers and solid agrochemical waste. Empty containers, other than those used for agrochemicals which react to produce gas with water, e.g. phosphide, should be washed at least three times and stored in a secure dry area with agrochemical waste; they should never be used to store food, water or other substances that may be consumed by people or animals. It should be remembered that a tiny amount of agrochemical residue from within the container could lead to serious illness or death;

– preparation areas. Where agrochemicals are dispensed into application equipment close to the store, a solid level surface should be available. They should drain only into an agrochemical containment area, to avoid polluting the surrounding environment.

2.3.5. Dispensing

Agrochemicals such as fertilisers, dusts and granules may be supplied ready for use. Others such as pesticides would need to be measured from concentrated formulations and mixed, for example with water. Dispensing agrochemicals in this way requires particular care to ensure that it is carried out safely and efficiently. This will include:

– reading the label in order to work out what equipment, such as measuring jugs, funnels, stirrers and protective clothing, is required (figure 15);

Figure 15. Always read the label before using agrochemicals

– decontaminating the utensils used for dispensing by washing or cleaning and returning to safe storage. Care should be taken to avoid inhalation, ingestion or skin absorption.

Figure 16. Set out the dispensing equipment in an uncluttered place

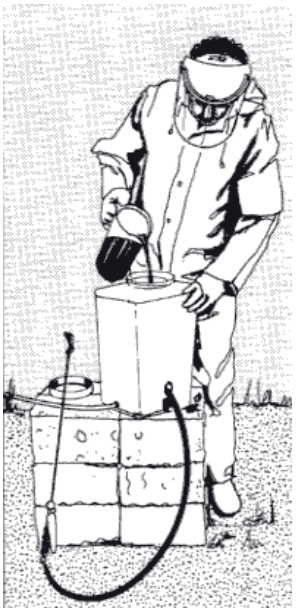


Figure 17. Wear the appropriate protective clothing when dispensing agrochemicals

– setting out the agrochemical and dispensing equipment at an uncluttered place away from homes or livestock, and which could be cleaned of any spillage should it occur (figure 16);

– reading the label again to work out the correct dose rates and dilutions and how this can be achieved with the dispensing equipment available;

– wearing appropriate protective clothing, particularly gloves, as specified on the label or recommended in information sheets (figure 17);

– adding the dispensed agrochemical to the applicator in such a way that it is part full of water or any other diluting fluid recommended. This would prevent any accidental splash-back of the concentrated substance;

– carefully emptying packs of agrochemical dusts and powders into applicators to avoid their becoming airborne and being inhaled;

2.3.6. Pesticide application

The safe use of pesticides is determined by the care and attention given to precautionary measures before, during and after application. It is very important to select the safest agrochemical that will act effectively with the least risk to people, livestock, wildlife and the environment.

There are different types of application equipment. The type of equipment to be used depends on:

– the scale of operation; and

– the form in which the agrochemical is applied.

It is not possible to give safety instructions about the full range of agrochemical application machinery in this guide. Some general principles, particularly with regard to the use of portable sprayers, are listed under three separate steps: prespraying, during application and post-spraying precautions. These must be observed in order to ensure effective and safe use. Before discussing these steps, all agrochemical users must ensure that they are properly trained as sprayer operators. If a helper is at hand he or she should also be trained. Users should ensure that the training has adequately covered the following aspects of application:

– choice of equipment;

– checking of equipment to ensure proper functioning;

– filling the applicator with the agrochemical;

– calibrating;

– operating;

– safety precautions and emergency measures in the event of malfunction or accident;

– cleaning, maintenance and replacement of spare parts;

– fault-finding;

– attending to simple repairs.

Users should ensure that the users' instruction manual (or similar operating instructions guide) giving detailed instructions on:

– operating procedures;

– replacement of spare parts; and

– repairs;

is always available for reference.

2.3.6.1. Pre-spraying precautions

– Read and understand labelled instructions and any other information provided with either the agrochemical, the application equipment or the protective clothing (figure 15).

– Assess the risks of application to people, animals and the environment and decide what action is necessary to reduce or eliminate them. Apart from the points covered in this guide there may be others because of the many, varied and sometimes unique circumstances of pesticide application. Seek the necessary advice before you commence application.

– Ensure that the user is competent and that he or she has received effective training in application techniques and the precautions to be observed. The user should also be familiar with the requirements under the law and guidance given in codes of practice.

– Arrange such health monitoring as may be necessary for certain hazardous agrochemicals based on their frequency of use. Do not use organo-phosphorus or carbamate pesticides if under medical advice not to do so.

– Check application equipment to ensure that it operates satisfactorily without leaking or spilling and is calibrated for the necessary application rates.

– Check that protective clothing and other safety equipment including breathing apparatus, if required, is complete, is of the correct quality and is in good condition. Replace any items that are worn or missing.

– Decide how the work is going to be done and set up an action plan to cover its implementation, together with any emergencies that may arise.

– Check that weather conditions are satisfactory, particularly to avoid excessive wind speeds and consequent spray drift.

– Warn people nearby if they might be affected in any way or have a need to know. They may include bee- keepers, school authorities, or someone in charge of water supplies or sensitive plants or animals.

– Ensure the safe disposal of empty containers, tank washings and surplus pesticides.

2.3.6.2. Precautions during application

– Do not apply agrochemicals without adequate training.

– Wear appropriate protective clothing as prescribed on the label or information sheet for handling concentrated products.

– Avoid blow-back from granule or powdered materials when transferring container contents into the application unit. A slow, steady release causes least disturbance of air and reduces the risk of particles becoming airborne and being inhaled.

– Mix only the correct amount of agrochemical required for a particular task so as to avoid the need to dispose of any surplus.

– Handle containers carefully to prevent gurgling or spillage during pouring into an applicator. Pour correctly from large containers with the spout uppermost so as to allow air to flow into the container at the same rate as the contents flow out (figure 18).

– If two or more agrochemicals have to be mixed, ensure that they are compatible and without risk of a chemical reaction that would cause a “tank mix” operator hazard.

Figure 18. Pour correctly from large containers with the spout uppermost

– Where protection is supplemented by an engineering control measure such as an autofill device, a closed system or a cab filtration unit, ensure that these controls are functioning correctly.

– Use an agrochemical only for the purpose for which it was intended and at the correct application/dilution rate. Ensure that an edible crop has a sufficient time interval between application and harvest so as to protect the consumer from ingesting unacceptable levels of pesticide residues.

– Do not eat, drink or smoke while applying agrochemicals.

– Ensure that dangerous practices such as putting a blocked nozzle to the mouth to blow it clear are prohibited. Clean the nozzle with water or a soft probe, such as a grass stem.

– Do not allow other workers in the field, particularly when pesticides are being applied. Take particular care to observe that children are neither allowed to spray nor are exposed to pesticides.

– Take notice of changing weather conditions, such as an increase in wind speed. This would cause drift and could blow the spray towards sensitive areas such as a drinking-water supply, resulting in health hazards. It may also blow the spray towards the operator, causing an inhalation hazard.

– Look out for overhead electricity cables and make sure that the spray boom will not come close to “live” wires (figure 19). The spray boom would act as a conductor of electricity and the operator could be electrocuted. Fatal accidents have been caused by such negligence.

Figure 19. Look out for overhead electricity cables

– Never leave containers open and containers or application equipment unattended.

– If spillage occurs, keep everyone away until it is cleaned up and disposed of safely. This may be done by washing or using absorbent material such as soil or sawdust to soak up the agrochemical.

– Fumigants supplied as liquefied gas in pressurised cylinders are subject to special rules. Observe the rules applying to each liquefied gas under pressure.

Figures 20 and 21 show correct methods of manual spraying.

Figure 20. Correct method of using a knapsack sprayer

Figure 21. When spraying trees, take notice of wind speed and direction

– Return unused agrochemicals to safe storage and safely dispose of empty containers and any surplus in the application equipment.

– Decontaminate application equipment by washing it thoroughly (figure 22). The washings should be drained into a soak-away or similar chamber to be safely confined and without risk to the environment.

– Decontaminate protective clothing by thoroughly washing items such as apron, boots and face shield. Launder the work clothing each day after spraying. Gloves should be washed inside and out and allowed to dry. Respiratory protection equipment should be wiped clean.

– Bathe or wash thoroughly again after completing the above four actions.

– Complete a record of use so as to provide information about the agrochemicals used, the date and place of use and the name of the user. This is both good management practice and also a source of reference in the event of agrochemical-related illness.

– Remove warning signs when no longer necessary so that they remain meaningful and carry a message that is always relevant. The warning signs are then more likely to be taken seriously.

Figure 22. Clean thoroughly all equipment used for application of agrochemicals. Take care not to contaminate the environment with waste water

2.3.6.3. Post-spraying precautions

– Thoroughly wash hands, face and neck as well as other parts of the body which may have become contaminated. If gloves have been worn, wash them before removal.

2.3.6.4. Re-entry

The time interval that should lapse between agrochemical application and entering the treated area for safety reasons is known as the re-entry period. It is an interval during which traces of the chemical would have been absorbed by the crop or otherwise removed from plant surfaces. In practice, the timing of the re-entry period is subject to many variables, such as the nature and toxicity of the product, its application rate, weather conditions and the surface area of the crop treated.

The minimum re-entry period should be increased substantially if entry into treated areas would result in exposure to more than an occasional skin contact or if individuals who might be susceptible had to enter. These may include children and others likely to develop skin allergies or similar adverse reactions on exposure to traces of chemicals. If entry is required to a treated area before the re- entry period, then protective clothing appropriate to the pesticide should be worn.

The re-entry period should not be confused with the harvesting interval, which is the time between agrochemical application and the harvesting of a crop for eating.

There may be circumstances when a re-entry period for animals is also prescribed. Animals may be particularly vulnerable to the agrochemical sprayed or to the effect of the agrochemical on the vegetation that might make it taste or smell different. This may confuse the animals into eating poisonous plants which they would otherwise avoid (for example, herbicide spraying on ragwort).

Minimum re-entry periods

The following re-entry periods could provide the necessary protection under normal conditions of use:

Agrochemical	Suggested re-entry period

(a) Any agrochemical with a specific labelled or data-sheet requirement for re-entry	As described on the label or data sheet
(b) Any agrochemical which is classified as either very toxic or toxic and is applied as a spray, dust, granule or in any other form in the open air such as in a field, orchard, vineyard or hopgarden	Three days
(c) Any agrochemical which is classified as harmful, irritant or corrosive but is applied as *(b)* above	Two days
(d) Any pesticide which is unclassified but to which the circumstances in *(b)* above, would otherwise apply	One day
(e) Any pesticide used as a fumigant or gas treatment within a building, greenhouse, mushroom shed or other enclosed space	12 hours, but first ventilate for at least one hour or more to ensure a complete change of air

During the time that entry to any treated area is prohibited, action should be taken to ensure that those concerned are aware of the restriction. In most cases a hazard warning sign prominently displayed at entry points such as field gateways and footpaths would be sufficient. There will, however, be circumstances where signs are inadequate. If children or adults with reading or seeing difficulties are likely to enter a sprayed area, an alternative but equally effective means of warning, such as fencing or a loudspeaker announcement, should be made.

2.3.7. Other agrochemical applications

Agrochemicals are also applied as veterinary products, fertilisers and commodity chemicals. The precautionary measures described earlier also apply to these types of product. Different methods of agrochemical application will, however, require further consideration of risks to the user. Precautions as illustrated by the following examples should be taken:

– Animal injection treatments occasionally result in skin grazing or self-injection of the handier.

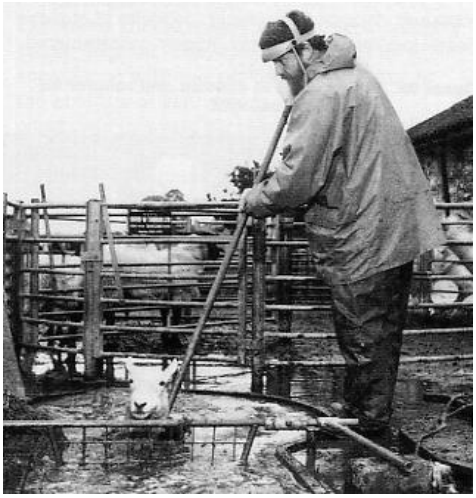
Prevention requires patience and care with excitable animals. A needle set in a retractable spring-loaded sleeve which protects against accidental contact should be used.

– Animal dips for sheep or cattle are a site of intense activity and contamination. There is often much physical handling of livestock together with the splash of immersion and the cloud of spray from the animal shaking itself on exit (figure 23). The agrochemical in use generally requires a basic level of personal protection (figure 24). In addition, any person working at the site of exit might require some respiratory protection. Alternatively, a rota system of working on short shifts should be arranged.

– Hydrofluoric acid is used to clean debris and moss growth from the roof surfaces of glasshouses. Application may be by means of a brush or by spraying from a knapsack sprayer. In such instances, personal protection appropriate to work with strong acids is necessary (figure 25)

Figure 23. Avoid contamination from animals shaking themselves after a pesticide dip

Figure 24. Use personal protective clothing when dipping animals



– Formalin liquid is made to react with potassium permanganate to produce formaldehyde gas as a fumigant. This is a common treatment against disease-causing organisms present in some livestock buildings. The main precaution is in the mixing, which requires the measured amount of potassium permanganate to be added (last) to the required quantity of formalin; never the other way around, because the reaction and heat generated would be particularly violent.

– Strychnine and cyanide may, in certain exceptional circumstances, be approved for the control of pests such as moles or rabbits. The agrochemical is usually released underground. These extremely toxic substances should be used only by those thoroughly trained in all aspects of the work and the precautions to be observed.

– Fertilizers supplied as granules or naturally occurring rock powders may be applied by hand or by tractor- drawn machine. Applying fertilizers by hand should be avoided by using a shovel or spade. If handling is unavoidable, suitable protective gauntlet gloves may be needed.

– Liquid fertilizers are used in modern horticultural units where plants are reared hydroponically under glass roofs and individually fed through an arrangement of flexible pipes from a liquid mix and metering control unit. The concentrate may include products such as nitric and phosphoric acid which will require the handler to be protected against acids which can burn the skin. When opening acid containers, precautions should also be taken to disperse any gaseous fumes safely.

– Silage additives often include acids such as formic, phosphoric or sulphuric acid. Application is generally from a sprayer unit attached to the forage harvester. Appropriate personal protection is necessary when handling strong acids.

Figure 25. Personal protective clothing appropriate for working with hydrofluoric acid

2.3.8. Spillage

Agrochemical spillage is both wasteful and hazardous. It should be avoided wherever possible but when it occurs it should be dealt with immediately. Some common causes of spillage are:

– containers bursting as a result of bad handling;

– container leaks due to defective packaging that does not withstand heat or humidity;

– containers being punctured during transport by sharp edges or metal studs protruding upwards through vehicle floorboards;

– careless pouring while transferring from container to applicator;

– equipment failure prior to or during application because of worn pipe couplings or hose lines.

Action in the event of spillage should include:

– taking immediate steps to avoid the spillage spreading and contaminating a wider area;

– keeping other people, animals and vehicles away from the site;

– wearing protective clothing appropriate to the use of the concentrated formulation involved;

– soaking up the agrochemical with absorbent material such as dry sand, soil or wood shavings in the case of a liquid, and removing the contaminated matter with a brush and shovel and storing securely in a bag to be disposed of safely (figure 26);

Figure 26. Using sand to contain and remove an agrochemical spill

– removing a dry powder or granule gently with a brush and shovel and storing securely in a bag to be disposed of safely. If there is a risk of the spillage becoming airborne, some damp sand should be scattered before attempting to decontaminate;

– decontaminating any remaining traces of spillage including that on vehicles or equipment by washing down and draining the contaminated water to a safe place, or soak-up;

– bathing or thoroughly washing immediately afterwards.

2.3.9. Disposal of containers and waste

There will be circumstances when agrochemicals in store need to be disposed of safely. They may no longer be required or may be out of date, or the packaging may be broken or the container damaged. Similarly, deposits of spillage clean-ups, discarded items grossly contaminated with agrochemicals, contaminated aqueous waste such as animal dips, and empty containers must be disposed of safely.

The following general steps should be observed during disposal of waste:

– Agrochemical waste should never be dumped indiscriminately.

– Agrochemicals should never be disposed of so as to cause any risk to people, animals, crops, water supplies or the environment.

– First of all, the supplier should be asked if he would accept the waste for disposal.

– Whenever possible, waste should be disposed of through a company or persons licensed to handle waste disposal. Advice should be sought from the supplier, local authority or community leader.

– Accumulation of waste should be avoided. Waste should be disposed of as soon as possible.

– The user should read the label on the package or container for any specific advice on waste disposal.

– Empty agrochemical containers should never be reused except possibly, if in good condition, to contain an identical product transferred from a deteriorated or leaking container. All other containers should always be cleaned thoroughly before disposal. They may be cleaned in accordance with the labelled instructions. In the absence of instructions, rinse the containers in water successively at least three times. Care should be taken to ensure that the water used for rinsing does not contaminate the environment; particularly drinking-water, for example.

– Liquid containers should be drained out before cleaning. Ideally cleaning should take place when a spray mixture is being prepared so that the drained material and the rinsing liquid can be added to form a part of that mixture. In other instances the rinsings should be collected for subsequent disposal elsewhere. After cleaning, the containers should be punctured in several places or crushed to make them unusable, and stored in a secure compound until their disposal is arranged. Packages of dry powders and granules must be shaken out thoroughly into a mixing vessel or the applicator tank.

– Containers may be buried on premises owned or occupied by the agrochemical user. The burial site must be chosen carefully so that there can be no risk of pollution to surface water or groundwater. The approval or the advice of the local authority should be sought beforehand. The containers should be buried to a depth of at least 1 meter below the surface and below the level of any land drains (figure 27). The area used should be fenced or marked with warning signs. A record should be kept of the dates and the material buried.

– It should be possible to obtain the permission of the local authority to have a common disposal site, such as a landfill, for several users. It should allow secure burial of waste to a depth of at least 1 meter below the surface and away from any land drains or water courses so that there is no risk of seepage from the site which might cause pollution (figure 28).

Figure 27. Containers and waste should be buried at a depth of 1 meter

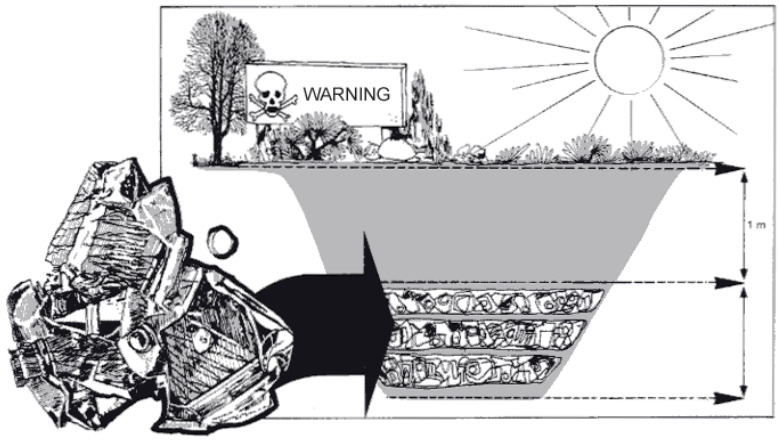
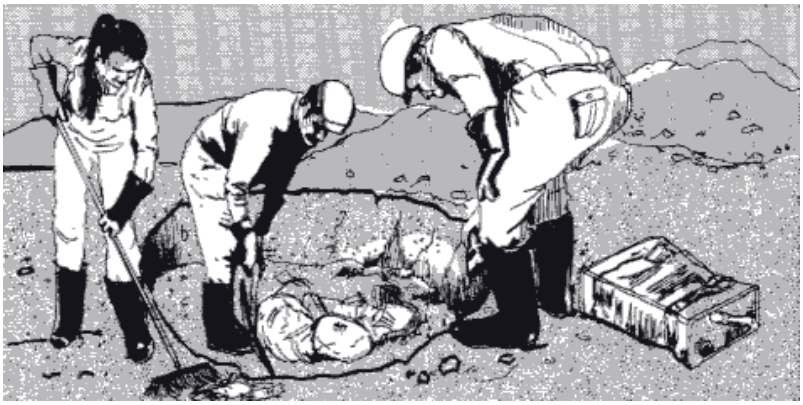


Figure 28. Choose a safe disposal site for burying agrochemical waste



– During burial of waste, protective clothing appropriate for the most hazardous product handled should be worn.

– Containers in which hydrogen cyanide gassing powders or aluminium, magnesium or zinc phosphides were supplied, or which have contained these materials, should not be rinsed or cleaned with water when empty. These substances react with water to produce hazardous gases. Instead they should be filled with dry earth and punctured in several places immediately before disposal. The treated containers should then be buried. On no account should the empty containers be taken into or kept within a building.

– In certain instances it may be permissible to burn lightly contaminated packaging as a means of disposal. Fumes and any smoke produced may, however, present a serious health

risk and advice from the supplier of the agrochemical should be sought for any activity other than a very minor operation. The local authority should be consulted beforehand.

– When waste packaging is to be burnt (figure 29), the user should ensure that:

(a) burning takes place in an open space at least 15 meters from a public highway and not in a location where any smoke produced is likely to drift over persons or livestock or move towards housing or business premises;

(b) a perforated metal drum or a fabricated incinerator is used for the bonfire;

(c) all containers are opened and placed on a very hot fire a few at a time;

(d) the fire is supervised constantly and care is taken to avoid breathing any smoke produced;

(e) the fire is extinguished after use;

(f) any residues resulting from the operation are buried as described earlier.

– On no account should packaging or containers which have held any of the following pesticide

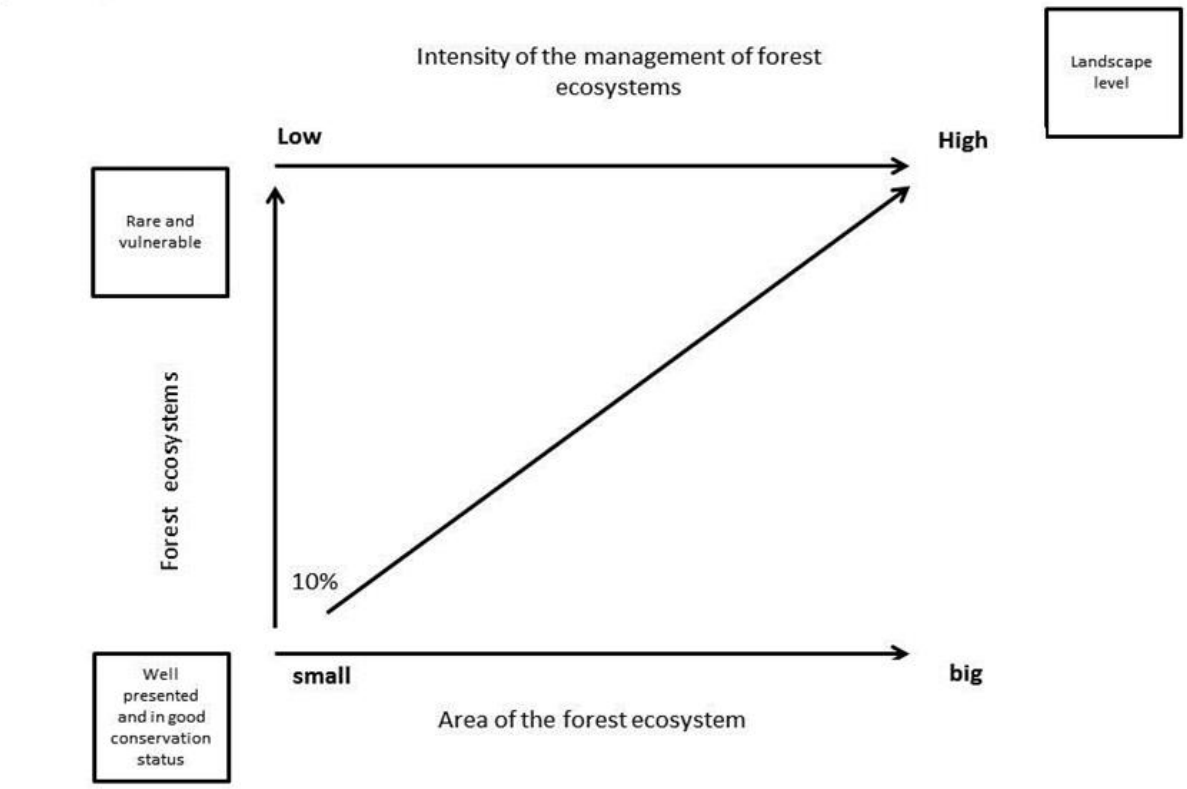
formulations be burnt: benazolin, clopyralid, 2,4-D, 2,4-DB, dicamba, dichlorprop, fenoprop, MCPA, MCPB, mecoprop, oxadiazon, picloram, sodium chlorate, 2,4,5-T, 2,3,6-TBA, triclopyr; other pesticides or formulations classed as “highly flammable pyrotechnic devices”, e.g. smokes and atomisable fluid containers under pressure. These should be buried.

– Some agrochemical operations may produce liquid waste. It will then be necessary for the user to provide arrangements for safe disposal such as the construction of a soak-away which should be environmentally acceptable for the types and quantities involved. The user should consult the local authority and seek the advice of the supplier.

– On completion of spraying all the equipment involved in the operation needs to be cleaned, washed and rinsed. This will produce a relatively large volume of dilute pesticide for reuse or disposal. Possible disposal routes include authorised discharge into a sewer connected to a sewage works with or without some prior treatment, or the use of a suitable soak- away. The local authority should be consulted.

Figure 29. Burning agrochemical containers

Annex 11: Defining the representative sample areas



The area of the representative sample areas of natural forest ecosystems is defined considering the following subordinations:

1. If a certain forest ecosystem is largely distributed on the territory of the management unit sample areas are identified that are not less than 10% of the total area of this ecosystem within the management unit and the samples are uniformly distributed along the whole area of the whole management unit.
2. If certain forest ecosystem is rarely met on the territory of the management unit, then larger percentage of its total territory shall be identified as representative samples.
3. Aiming at the protection of the landscape it is recommended that the area of the representative samples shall grow with the growth of the intensity of the management.

Annex 12: Sources of best available information

Sources of best available information for identification of the environmental values on the territory of the Management Unit and beyond it that are or potentially may be affected by the management activities

1 . For ecosystem services – information from the HCV report, District plan for development of forest territories, management plans of protected territories and zones, specialized researches, etc.

2. For biodiversity – data from the inventories of the Management Unit, specialized scientific researches, HCV report, management plans of protected territories and zone, orders for promulgation of protected territories and zones, topical lists of rare and threatened species at the Bulgarian Red Data Book., CITES, Bern and Bonn Conventions and other relevant lists on national and European level, etc.

3. For water resources – topical information about water bodies on the territory of the Management Unit from check-ups made by the River-basin Directorates and Regional environment inspectorates (regional authorities of the Ministry of environment and waters) related to significant problems of the management of water on the territory of the Management Unit and outer territories outside it.

4. For soils – soil maps, information from the inventory of the Management Unit, specialized scientific researches, management plans of protected territories and zones, etc.

5. For the landscape values – reports on the condition, specialized scientific researches, management plans of protected territories and zones, etc.

6. For all values 1-5 – consultations with local and national exerts and interested stakeholders.

Annex 13: HCVF Toolkit

* For the sake of convenience and clarity the HCVF Toolkit can be downloaded as a separate document from the website of WWF Bulgaria (www.wwf.bg) or provided by WWF Bulgaria at requiest.

A practical guide for Identifying, Managing, and Monitoring of High Conservation Value Forests in Bulgaria

Updated version, February 2016

Prepared with the active support of ProForest on behalf of the WWF and IKEA Co-operation on Forest Projects. The updated version of the guide was prepared in the period 2014 -2016 with the support of WWF and the working group for development for national FSC Standard for Bulgaria within a partnership of WWF and IKEA

CONTENTS

HCV 4.1 Unique sources of drinking water
HCV 4.2 Forests critical for the regulation of water flow in catchments
HCV 4.3 Forests critical for erosion control
HCV 4.4. Forests providing a barrier for fire
HCV 4.5. Forests with critical importance for the protection of agricultural activities (agriculture, aquaculture) and infrastructure sites
HCV 5. Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for example for livelihoods, health, nutrition, water), identified through engagement with these communities or Indigenous Peoples
HCV 6. Cultural values. Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples, identified through engagement with these local communities or Indigenous Peoples.
ANNEXES
Annex 1a: List of endangered, threatened with extinction and endemic plant species in Bulgaria, indicators for High conservation values in forests.
Annex 1b: List of endangered, threatened with extinction and endemic animal species in Bulgaria, indicators for High conservation values in forests and measures for conservation of their habitats.
Annex 2: List for identifying critical concentrations of species in Bulgaria and perimeter of non-disturbance areas.
Annex 3: List with the HCV2 forest areas in Bulgaria.
Annex 4: List of endangered, threatened with extinction or endemic ecosystems in Bulgaria
Annex 4a: Management characteristics and recommended forest management activities for the ecosystems in Annex 4
Annex 5: Methodology for identification of HCV 5. Preliminary assessment
Annex 5a: List with undeveloped rural areas in Bulgaria, defined under regulation 105/02.06.1999.
Annex 6: Methodology for identification of hcv5 – Full assessment. Management and monitoring of HCV5 forests.
Annex 7: List of religious places of critical importance for Christians and Muslims.

Introduction of the HCVF Toolkit

What are HCVs and HCV Forests?

Modern understanding of forest as a multi functional system, including ecological, social, economic, aesthetic and other functions needs broader reflection of its values in national and world legislation and increasing number of initiatives and activities for its management.
The idea of High Conservation Value Forests (HCVFs) was developed by the Forest Stewardship Council (FSC) and first published in 1999. This concept moves the forestry debate away from definitions of particular forest types (e.g. primary, old growth forests) or methods of timber harvesting (e.g. industrial logging) to focus on the values that make a forest important. By identifying these key values and ensuring that they are maintained or enhanced, it is possible to make rational management decisions that are consistent with the maintenance of important environmental and social values.

The key to the concept of HCVFs is the identification of High Conservation Values (HCVs). The international definitions of HCVs are given in Table 1. HCVs are values that are important and need to be protected. High conservation value forests are forest territories (incl. territories without forest cover such as lakes in the forests, forest meadows, etc.) with high conservation values. Having identified HCVs, the forest manager should plan management in such a way as to maintain or enhance the identified HCVs and to put in place a monitoring programme to check that this is being achieved.

Definition of High Conservation Value Forests
High Conservation Value (HCV): Any of the following values:

- HCV1: Species Diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.

- HCV 2: Landscape-level ecosystems and mosaics. Intact Forest Landscapes, large landscape-level ecosystems and ecosystem mosaics that are significant* at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

- HCV 3: Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats or refugia.
- HCV 4: Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

- HCV 5: Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for example for livelihoods, health, nutrition, water), identified through engagement with these communities or Indigenous Peoples.

- HCV 6: Cultural values. Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples, identified through engagement with these local communities or Indigenous Peoples.

HIGH CONSERVATION VALUE FORESTS (HCVF): Forest areas that have at least one of the six high conservation values as defined by FSC. (See the above definition for HCV)
Apart from its use in forest certification, the HCVF approach is increasingly being used for mapping, forest and landscape management and conservation decision-making approaches to forest resources. It is also being used in purchasing policies of timber companies or companies producing wood products. The HCVF approach recently has begun to appear in discussions and policies of government agencies.
What is the hcvf toolkit? The High Conservation Value Forests (HCVF) Toolkit provides a practical methodology to be used on a routine basis to identify High Conservation Value Forests (HCVF). It also provides guidance on the types of management and monitoring that are necessary if such a forest has been identified.
After a discussion about identification of national High Conservation Values and their finalization, a number of potential uses of this toolkit is to be found:
a. Use by forest managers to meet standards related to HCVF
Forest managers can carry out evaluations on their forest areas to determine whether any of the defined HCVs are present within their forest management unit (FMU). Forest managers can integrate HCV identification and management into their overall forest management planning and activities. In order to fully implement certification requirements related to HCVF, HCVs should become an important element of baseline information collection and impact assessment, management planning, implementation of operations and monitoring.

b. Use by certifiers assessing HCVF

The defined national HCVs, together with management guidance, should form the HCVF element of national forest management certification standards. This would depend on the conclusions that have a broad support from a wide range of stakeholders and that have been

the subject of an inclusive consultation process, according to the rules of the certification scheme.

Certifiers would also utilise the defined national set of HCVs for carrying out assessments in the evaluation of compliance with certification requirements of specific FMUs.

c. Use by landscape planners trying to prioritise different landuses and by forestry planners

Based on information that is already available or is being collected, the defined national HCVs can be used to draw up landscape-level plans and maps to show actual or potential HCVF. Such maps could then be used to inform and prioritise district and regional spatial and land-use planning decisions and conservation planning, and the development of forestry projects and plans.

d. Use by purchasers implementing policies related to HCVF

Purchasers implementing HCVF policies can utilise information about the presence of HCVs, or use the nationally defined sets of HCVs to undertake evaluations of the presence of HCVs in specific FMUs, or in setting precautionary purchasing policies. Examples could be given with big companies like IKEA, Cronospan, Fratti, CareFor, OBI, etc., which base their international timber supply policies on the HCVF methodology.

The use of this guide requires some knowledge of the conservation and social issues, which constitute the High Conservation Values. Toolkit users must evaluate whether local forest areas are exceptional – in terms of ecological and social importance. This will require an understanding of the uniqueness of forest areas and their trends and threats to their resources. It is very important that toolkit users communicate with regional, national and international experts (scientists - foresters, biologists, ecologists, sociologists, research institutions, NGOs) to evaluate the importance of a particular forest area.

This HCVF Toolkit has been developed to help interested parties understand the HCVF concept and conduct an HCVF evaluation. It will also help to ensure more consistent interpretation of the concept withinBulgaria. The Toolkit has not been developed by FSC and thus should not be considered as an official FSC policy or guidance. The updated in 2016 version was made an Annex of the National FSC standard for Bulgaria.

How was the toolkit developed? The Bulgarian Toolkit uses a format similar to a Global Toolkit developed by ProForest. The Global Toolkit was created to help drafting groups develop guidance on HCVF at a national level. The Global Toolkit is expected to guide the development of national toolkits in many countries all over the world. Proforest and the WWF Danube-Carpathian Programme (DCP) organized a meeting in May 2003 in Sofia to discuss the Global

Toolkit. The meeting was attended by representatives from the National Forestry Board at the Ministry of Agriculture and Forests, of the National Nature Protection Service at the Ministry of Environment and Water, as well as by representatives of international forestry projects and non-governmental organizations working in the field of forest management and nature conservation in Bulgaria.

The toolkit interprets high conservation values identified in the FSC's forest management Principle Nine (see Table I above) within the context of Bulgarian conditions and has created specific High Conservation Values appropriate within the country.

During the development of the draft national toolkit, the Global Toolkit was analysed for its consistence with the operative national legislation and existing forestry practices in Bulgaria. The analysis was carried out by two Bulgarian experts and together with the Global Toolkit it was used by the working group as a main source of information. Materials were used from sociological studies and also from statistical research works, carried out by other forestry and social projects. The Institute of the Monuments of Culture, the Institute of Ethnography and the Institute of Archaeology provided data and maps. Inquiries were submitted to the Holy Synod - Sofia, the Head Office of the Mufti and to the Catholic Church in Bulgaria.

The working group established for the development of the draft HCVF Toolkit includes experts in forest management, experts in the social field, biodiversity and certification experts, forestry experts, experts in forest fires and erosion. The working group includes also representatives of the National Forestry Board, Ministry of Environment and Water, Institute of Forests, Faculty of Biology to the Sofia University, Vitosha Nature Park Directorate, Green Balkans, Balkani Wildlife Society, Bulgarian Society for the Protection of Birds, German-Bulgarian Forest Project, Bulgarian-Swiss Biodiversity Conservation Programme, ProForest, World Wide Fund for Nature, etc. Some of the working group members have participated in the development of the Bulgarian Forest Certification Standard.

The identified HCVs and the toolkit methodology were field-tested in the autumn of 2004(State game breeding station Rakitovo), and also during the real forest management certification process according to FSC scheme in the spring of 2005 (Dospat SFU and Borika Private Cooperative, Stoikite village). A broad consultation process was carried out and the draft toolkit was represented in front of a wide range of forest experts and stakeholders. The team collected the opinions, comments, recommendations or additions from as biggest as possible number of stakeholders, in order to incorporate them into the form and contents of the national toolkit. The Toolkit was coordinated with National Forestry Board (NFB), which is the body responsible for the forest management of state forests and the control over forest activities in the country. For this purpose in the National Forestry Board was created a expert working group, who will adapt the toolkit to the practises and forest administration in the country.

The structure and content of the National Toolkit are in compliance with the received consultation materials, so that it is as complete as possible and suitable for the country conditions and for use in everyday forestry practices.
In the autumn of 2005 the finalized Toolkit was presented on a Public national meeting/workshop aiming its popularisation among as much as possible stakeholders and its faster implementation in practise.
Once implemented in practise The Toolkit will be updated regularly according to the enhancement of different forest practises and legislation. Last update of certain elements mainly in Section HCV 6, and in the Annexes and Lists of Species to the Toolkit has been undertaken in the period August 2014 – February 2016. The proposals have been developed by experts from the Bulgarian Academy of Sciences and by professionals in the field of tourism and social development with the support of WWF Danube Carpathian Programme Bulgaria. The Toolkit is included as an annex to the national FSC Standard for Bulgaria. The lists referring to HCV 2 are also updated.
The national toolkit for identification, management and monitoring of HCVF is available for all stakeholders, it can be provided by WWF Bulgaria office, e-mail: office@wwfdcp.bg; fcic@wwfdcp.bg , www.wwfdcp.bg .

Using the toolkit: The toolkit includes one chapter for each of the six types of High Conservation Values, as well as an appendix. Each chapter begins with an introduction (including the FSC definition of the value) and a list of the relevant components of the high conservation value for Bulgaria. These are the values that users must examine within the context of a forest management area.
Each component consists of a discussion, rationale and instructions/guidance to users on the identification of the value's presence and on managing and monitoring the forest resource to maintain the value. These sections form the heart of the HCVF toolkit.
Rationale The rationale provides background and justification as to why a particular attribute is considered of high conservation value. Further on, the rationale lists the specific types of forests or forest uses that should be considered as a HCV.
Identifying the Presence of a HCV The toolkit includes an evaluation methodology for each component and its applicability within a forest management unit. Toolkit users are asked to compile information or answer questions that can be examined using government and forest management planning documents, maps and satellite images, knowledge of the trends and threats to forest resources, and consultations with local communities and other stakeholders. The identification process and task depends on the complexity of each component. For components that are relatively simple to evaluate, the toolkit includes a description of an appropriate task to make this determination.

However, for many components (e.g. HCVs 5&6) the evaluation process will be more complicated, timely, and possibly costly. In these cases, the toolkit has divided the process into preliminary and full assessments. For social values, a threshold is introduced for determining if a value is fundamental or critical to the wellbeing of local communities.

The preliminary assessment is a simple methodology to see if HCVs are likely to occur or not. This acts as a coarse filter, rapidly excluding all forests that definitely do not contain HCVs, and identifying forests that potentially contain specific HCVs. The preliminary assessment should be straightforward enough to be undertaken by people without special knowledge of biological or social sciences (e.g. forest managers and timber purchasers). The preliminary assessment is usually in the form of a "yes or no" question and ask about the presence of certain values. For example, a preliminary assessment may ask users to identify if communities or protected areas exist nearby an examined FMU. If the answer to the preliminary question is yes, then the toolkit user will need to conduct a more complete or full assessment of the value. Preliminary assessments often utilize maps and other information that can be easily accessed by forest managers. If a toolkit user determines that a forest area does not exhibit the specific characteristics, then this HCV does not need to be further examined.

The full assessment is a more time-consuming methodology identifying in detail what the potential HCVs are, or clarifying that there are no HCVs. This is a more thorough examination of the characteristics of a forest area or forest use and requires more information and expertise. A full assessment will usually require that the toolkit user contacts relevant experts and stakeholders and/or conducts specific research and consultations.

THRESHOLDS AND IDENTIFICATION OF SOCIAL HIGH CONSERVATION VALUES (HCVs 5 & 6)

The economic situation of the country for the past 13 years has turned forests into the main source of subsistence for the local people in many forest areas. Apart from the other services, forests play an important social function in mountainous regions. Forest resources are a main source of livelihood and income for most of the people living in the Rhodope, Balkan and Strandja Mountains. Non-material benefits from the forests are of no minor importance. Almost one third of the country area is covered with forests – a fact entailing a narrow relationship between people and forests. It has lasted for thousands of years and has had a strong impact on the culture, history and spiritual values of Bulgarian people. A substantial part of Bulgarian history and knowledge is related to forests and their landscapes. These relations vary greatly in different regions and among different cultural groups in Bulgaria. It is very difficult to determine which uses and traditions are critical and which are not. Inevitably, an attempt to develop specific national HCVs in as dynamic and fast changing country as Bulgaria will fail, because

the identified values would be appropriate in some areas or time periods and irrelevant or incomplete in others.

Thus, a modified process is used to identify HCVs 5 & 6. Specific components have not been identified as in the other sections of the toolkit. Instead, the toolkit provides examples of values and thresholds to help toolkit users determine when the relationship between forest areas and local communities is strong enough to be considered a HCV.

Thresholds are created to help understand the basic HCV definitions within the specific Bulgarian context. When is a forest fundamental to a local community's wellbeing? When is a forest area critical to community's culture? Thresholds can be either quantitative or qualitative.

The process of identifying relevant social values utilizes three-steps - a preliminary assessment, full assessment, and threshold evaluation. In other sections of the toolkit, if a forest area exhibits an identified value, the forest is considered a HCVF. However, as social values will be frequently applicable in Bulgaria, the toolkit user must evaluate whether the forest area is critical to maintaining the value. For example, if a community utilizes local forest areas for the production of fodder for animal breeding, the threshold questions help evaluate how much communities rely on the forest as a source of fodder and pasture.

The thresholds are questions that are examined as part of the consultative process with local communities and that are strongly linked to the information necessary to complete the full assessment of these values.

Thus the process of identifying social values will be:

Preliminary Assessment Questions: If relevant ⇒ Full Assessment Questions: If relevant ⇒

Threshold Analysis: Meets Threshold Criteria ⇒ HCV Identified

The toolkit drafting team has developed the social section on the base of existing studies and members' experience in numerous regions of the country. However, it is likely that the toolkit examples do not identify all types of potential HCV. Thus, this toolkit should be used as a guide to direct the HCV identification process and should be gradually developed with time. It is critical that toolkit users consult with local communities and other forest users on how each community values a forest area.

Recommendations for managing, protection and monitoring of values

If, after fully evaluating the relevance of a particular value, the examined value is not relevant, no further action is necessary. If a value/component is relevant to the FMU, then the manager must take steps to make the necessary changes to ensure the protection, management and monitoring of the value.

Recommendations are included to help toolkit users develop action plans (strategies) to maintain the high conservation values present within a forest area. Recommendations are brief and are meant to guide users on the types of information and consultations necessary to develop effective planning and monitoring programs. However, the recommendations are insufficient on their own, as a resource to provide detailed guidance and are not meant as standard operating procedures. The directions for HCV identification given in the toolkit refer to all forest areas within the country and to all types of forest ownership.
For additional information regarding the toolkit development, please contact WWF Bulgaria:
e-mail: office@wwfdcp.bg; fcic@wwfdcp.bg

Keys to hcvf success

CONSULTING EXPERTS AND DEVELOPING PARTNERSHIPS

The HCVF toolkit requires users to identify HCVs that cover a wide range of ecological, environmental, and social issues and requires an understanding of regional biodiversity issues, animal and plant ranges and behaviour, water and soil resources, ecosystem health, anthropology, and local economy. It is very likely that toolkit users will not have all of the expertise necessary to evaluate these issues alone. The toolkit process is highly reliant upon the input of local and national expert organizations and individuals.
The working group has tried to present information in a simple way and to make the toolkit as user-friendly as possible. Anyway, users should consult with experts during HCV identification and while developing management and monitoring techniques. In a number of cases, when toolkit users don't have the relevant education, these experts should provide the key inputs as to whether a forest area/forest type should be considered critical, threatened, etc. External experts and organizations will also be able to provide input on the status of forest types and of rare, threatened and endangered species, and help design management strategies to ensure the maintenance or enhancement of high conservation values.
Who are the regional and national experts? The drafting group itself includes representatives of various organizations, which could help toolkit users in practice. There are also other relevant organizations and scientific institutions. A special Appendix to the final toolkit will list the organizations that can provide information on communities and nature conservation in the country. The more relevant and reliable experts users consult and collaborate with, the greater the likelihood that good decisions will be taken.

PRECAUTIONARY APPROACH

An important component of HCVFs management is the application of the Precautionary Approach. HCVFs are, by definition, the most important forests from a conservation or social perspective (depending on the identified HCVs). Therefore, it is critically important that the

identified values are not lost. But with the current level of knowledge about forests and their functions, it is not always possible to be sure that a particular management strategy will be suitable in all cases. Therefore, it is essential to use the precautionary approach when dealing with HCVFs.

In practice this means: “Planning, management and monitoring of the attributes that make a forest management unit a HCVF should be based on existing scientific and indigenous/traditional knowledge, to ensure that these attributes do not come under threat of significant reduction or loss and that any threat of reduction or loss is detected long before the reduction becomes irreversible. In case a threat has been identified, early preventive actions, including halting the existing actions, should be taken to avoid or minimise such a threat, even if the causes and effects of the threat are not scientifically confirmed” (FSC Principle 9 Advisory Panel, 2000).

The precautionary approach operates both when identifying HCVs and when managing already identified HCVs, e.g.:

- Assessing the presence of HCVFs: where doubt exists as to whether an attribute, or collection of attributes, are sufficient to signify HCVs, then the forest manager should treat these attributes as HCVs, until information proves otherwise. This should occur when toolkit users and regional and national experts lack sufficient information to make an informed judgement. Examples of forests that might not appear valuable at first include fire damaged or logged areas that host important and endangered large carnivore species like the bear, wolf or others.
- Managing and monitoring HCVs: where doubt exists as to the appropriate management of the HCV, management should include treatments to the HCV at a scale and intensity that does not threaten the HCV, prior to the application of the specific management approach within the whole forest management unit.

The precautionary approach has been incorporated into the methodology for identifying HCVs and should also form an important basis for any management regime and monitoring programme. For example:

- In case that existing forest management practices do not maintain or enhance identified HCVs, they should be altered and stringent safeguards should be placed in compliance with the operative Forests Act, Biological Diversity Act, Protected Areas Act or even more stringent requirements should be placed, if needed. In FMUs, located in HCVF,

may need to reduce harvest intensities, create additional or larger conservation zones within production forest areas, and protect areas not currently protected.

- If communities rely upon a forest or a forest area for clean water supply or other such use, it is a HCVF. Any decisions on forest use should take this fact into consideration and should be made with genuine input from the interested community. Co-management and co-monitoring of production operations might be relevant. The communities are not restricted to those within the FMU; all communities are included, whose water supply depends on the particular forest area.
- If you are unsure whether a HCVF area can be logged or if it should be zoned as a conservation set- aside, put it into the set-aside until you have shown beyond doubt that the proposed harvesting regime will not harm the future of the forest. This will require detailed study of the area and development of location-specific management rules

HCV1. Species Diversity.

The complete heading of HCV 1 is as follows: Species Diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.

INTRODUCTION

This HCV pertains to FMU's management assessment in connection with biodiversity protection in a general way. This assessment refers to influence over species as influence over ecosystems and their functioning.

In the Bulgarian context this toolkit has identified the following components:

1.1 Protected Areas
1.2 Threatened, endangered and endemic species
1.3 Critical concentrations of species

HCV1.1 Protected areas and zones

RATIONALE

Protected areas (PA) are a vital component of biodiversity conservation. The identification of HCVFs included in protected areas can be easily done according to the operative national legislation. In Bulgaria a special Protected Areas Act (PAA) was enforced in 1998. It arranges the categories of protected areas in Bulgaria, their purpose, regimes of protection and use, and

their management. The different ownership, regimes and uses in these areas, the different responsible and management bodies, have resulted in the establishment of six protected areas' categories according to the Bulgarian legislation. Currently the total area of protected areas in Bulgaria covers about 5% of the country. The correlation between categories set by PAA and the IUCN categories of protected areas is given in table 2:

Table 2

PAA Categories	Definition of the category according to PAA	IUCN Categories
Reserve	Model natural ecosystems, including characteristic and/or unique wild plant and animal species and their habitats.	I (II)
National Park	Areas having no settlements within their boundaries and including natural ecosystems with a rich diversity of plant and animal species, characteristic and unique landscapes and sites of non-living nature.	II (V)
Nature Site	Characteristic or unique sites of non-living nature, such as rock formations of scientific value, earth pyramids, caves, pot-holes, waterfalls, deposits of fossils and minerals, sand dunes and others, which possess extraordinary values because of their rarity,	III (V)
Managed Reserve	Ecosystems including rare and/or endangered wild plant and animal species and habitats	IV
Nature Park	Areas including various ecosystems with diverse plant and animal species and habitats, with characteristic	V (VI)
Protected Area	1. Areas with characteristic and unique landscapes, including landscapes of people living in harmony with nature; 2. Habitats of endangered, rare or vulnerable	VI, III

Since 2007, with the accession of Bulgaria to the European Union, our country became part of the European ecological network Natura 2000. Natura 2000 is a Pan-European network made up of protected zones designed to provide long-term survival of the most valuable and threatened species and habitats of Europe in line with basic international agreements in the field of environmental protection and biodiversity. Ecological network was established on the basis of two European directives: Directive 92/43 / EEC on the conservation of natural habitats and of

wild fauna and flora (Habitats Directive) and Directive 2009/147 / EC on the conservation of wild birds (Birds Directive). These two European Directives were transposed into national legislation by the Biodiversity Act (2002). The national ecological network (part of Natura 2000) consisting of protected zones is covering approximately 34% of the territory. Over 75% of the protected Natura 2000 zones fall within forests and forest areas.
The size, distribution, condition and threats to protected areas will affect decisions on thresholds concerning other HCVs, as discussed later in this document.

DEFINITION, CRITERIA AND THRESHOLD

In Bulgaria HCVs are all protected areas and zones, as follows:

1. Lands and forests from the forest fund (LFFF) in reserves, managed reserves, national parks, protected areas, nature sites designated under the PAA;
2. LFFF in nature parks included in biodiversity conservation areas, designated under management plans or park management plans;
3. LFFF in nature parks without management documents;
4. LFFF included in protected areas designated under the Biological Diversity Act (BDA).

IDENTIFICATION OF HCV 1.1

The presence of all designated protected areas in FMU that could be affected by forestry operations should be specified. This information, as information refers to relevant management plans is available from:

- National Nature Protection Service at the Ministry of Environment and Water
- “Protected Areas, International Cooperation and Relations with NGOs” Department at the National

Forestry Board

- Directorates of State Forestry Units in the country
- Regional Inspectorates of Environment and Water
- Conservation organizations

If any such areas are identified in your forest management unit, follow the guidance below.

RECCOMENDATIONS AND INSTRUCTIONS FOR MANAGEMENT OF HCV 1.1

- Carry out forest management activities only according to the management plans that apply to protected areas as defined above and their buffer zones.
- If there is no endorsed management plan for related protected areas or zones then till its development management follows the requirements in PAA and in proclamation order, and following regulations: No clear cuttings, with exception for intensive plantations; Do not substitute the main forest species. Find the values that the protected areas are set up to maintain and assess how regimes and forest management activities

maintain these values. Forest managers have to be sure that there are no activities in FMU with negative impact over existing or proposed protected areas or zones.

- Make periodic checks for the establishment of new protected areas or new proposed protected areas that could potentially be affected by forest management activities.

RECCOMENDATIONS AND INSTRUCTIONS FOR MONITORING OF HCV 1.1

- Monitoring system is developed for each management plan in protected areas and has to be implemented. Forest managers have to identify indexes referred to observation of forest management activities and to carry out this monitoring according specified schemes, terms, criterions and methods of assessment.
- If there is no endorsed management plans for related protected areas or zones than managers have to contact the protected area or zone managers and all together have to follow for any negative impacts over HCV in protected areas. Together with protected area managers, define monitoring standard operating procedures and indicators to prevent negative impacts on protected areas' high conservation values by FMU operations. Examples can be affecting water quantity or quality, disturbing wildlife migration routes, increasing fire risks.

HCV 1.2 Threatened, endangered and endemic species

RATIONALE

Forests can be defined as habitats of importance for a number of rare and threatened vertebrate and invertebrate animal and plant species. It is difficult for forest managers to identify the numerous threatened species and to assess their presence within a protected area. The information currently available makes it difficult to assess the threshold numbers of populations or threshold biodiversity values, which identify the presence of HCV 1.2. Similar quantitative analyses could be made only for a small number of groups (for example birds). Under this HCV 1.2 come as forests - deposits of threatened and endangered species, as well as forests with natural characteristics making them a potential habitat of such species. This is due to the species rarity and necessity of protection habitats with critical importance for these and other species. That is why The Toolkit recommends habitats of indicator species to be used for the identification of this HCV. The indicator species are listed in Annex 1. This list is based on the "critically endangered" and "vulnerable" categories of the IUCN Red List, Red Book of the Republic of Bulgaria, volume I and II, and the Atlas of Endemic Species in Bulgaria. In the list are also included species that are important for the overall functioning of the ecosystems on a local scale. The list should be periodically revised with the alteration in species status.

DEFINITION, CRITERIA AND THRESHOLD

HCV are areas from FMU where each species listed in Annex 1 from the toolkit occurred. These are species with such a high conservation value, that the permanent presence of only one of

them in a FMU is sufficient to be this area a HCVF. LFFF including habitats of species listed in Annex 1 are HCVF.

IDENTIFICATION OF HCV 1.2

As part of the forest management the manager should already have conducted a biodiversity assessment resulting in species inventory within the area of the forest management unit. This information should now be analysed to determine whether the FMU contains any species from Annex 1 that are threatened, endangered or endemic. The presence of only one species from the list in the FMU is an indicator for HCV.

Where the habitat is part of a private property land, which is smaller than a subdivision, the property is defined as a HCVF. Where the property is bigger than a subdivision, the subdivision is defined as a HCVF.

For animal species HCVF can be bigger than the property, as the criterions for its definition are listed in Annex 1.

As regards the invertebrate species, considering their specifics the assessment is split into two stages – initial and final assessment (see Invertebrates in Annex 1). The initial assessment provides preliminary idea of the forest value and includes more common, more adaptable to the environment and easy to identify species. This assessment can be undertaken even by a nonspecialist or a forest manager.

The final assessment is undertaken based on major indicator species closely associated to deadwood. Considering that these species are difficult to identify and require a specific method for monitoring and research, their assessment is undertaken by experts in entomology.

RECCOMENDATIONS AND INSTRUCTIONS FOR MANAGEMENT OF HCV 1.2

- Periodic consultations with experts to assess potential presence of little known, but threatened, endangered or endemic species occurring in FMU.
- For every species with high conservation value, key information has to be identified. This should include: current status (population and distribution) in the whole country and on local level (in some cases species with lower conservation significance can be more significant in a local context); main trends and threats; Management impacts. The information must be considered to the particular HCVF, but also be in accordance with the other species habitats in the area.
- In areas defined according to the thresholds in Annex 1 are implemented only activities, under National Plans for Management of the Species (NPMS) where such plans are available.
- If there is no NPM of the species, on account of which is defined particular HCV, till its endorsement, management plan for HCVF is developed, which has to follow the

specific requirements of identified HCV. An expert for the specific HCV species participates in development of the Management plan.

- ✓ Specific recommendations have to be developed for management of each area with HCV (occurrence of some of the indicator species). Long term management plan for each HCVF have to be developed, considering requirements of identified species indicating presence of HCV, based on habitat-based approach. Management options include, but not restricted to: restoration measures; active management; strict protection. For example, it may be appropriate to mark and take into account during planning process and management: Some key reserve areas; Areas that maintain landscape-level connectivity; Areas that ensure maintenance of certain habitat features, such as provision of standing deadwood or riparian zone protection.
- ✓ In the context of the managed HCVF may arise other options. Expert guidance may be needed during process of inventory and planning of HCVF management. Integrate management proposals into the broader planning process.
- ✓ Forest managers have to be sure that measures are actually implemented, for example through changing operational procedures and training programme to ensure that those changes are implemented. Training has to be provided for the employees that participate in forest management activities. Training has to introduce restrictions caused by presence of HCV and measures for protection and conservation of these values.

RECOMMENDATIONS AND INSTRUCTIONS OF HCV 1.2

1. Have to develop indicators and plan for monitoring implementation and put them in practice.

Examples of key monitoring indicators: Specific wildlife populations and trends for their occurrence in FMU; Protection of environment, quality and consistency of the habitat; Pre-operational planning checks; other quantitative data from forest guards such as hunting records.

2. Forest manager have to be aware of any changes connected with protection of HCV on landscape and national level.

3. If the HCVs include samples of natural ecosystems within a substantially altered landscape, features that help to maintain those HCVs within the landscape (e.g. corridors and buffers) should be monitored.

HCV 1.3 Critical consertrations of species

RATIONALE

The purpose of this part is to provide protection of forests with critical species concentration, which use this forest area permanently or only during specific period or particular stages of cycle of life. This includes critical places for reproduction, winter shelters and migrations, migration routes and corridors (regarding latitude and altitude). In this HCV ca be used existing systems for identifying areas with high species concentration, for example Ornithology important places, Botanical important places, Herpetological important places and etc.

Examples for important temporary concentrations:

- Concentrations of migratory birds
- Concentrations of wintering birds (roosting, etc.)
- Nesting sites (bird colonies)
- Capercaillie courting grounds
- Bat colonies
- Fish migrations to spawning sites
- Deer rutting areas
- Congregations of amphibians and/or their offspring in water bodies or wintering sites
- Concentrations of migrating amphibians
- Reptile wintering sites
- Reptile congregations at the boundary of forest edge to open areas.
- Invertebrate congregations in old hollow trees, dead standing and fungi covered trees and decaying wood.

DEFINITION, CRITERIA AND THRESHOLD

Lists with species indicators for this CV with their minimal concentrations in Bulgaria are listed in *Annex 2*. There are specified threshold values for each species. When there is a

critical temporary or permanently concentration of species or important refuge areas, according to regulations in *Annex 2*, then the forest is HCVF.

IDENTIFICATION OF HCV 1.3

Identification of this HCV is divided into a preliminary assessment and a full assessment. If the preliminary assessment indicates that a HCV may be present, then the forest manager will be required to conduct further work to establish whether or not the HCV is actually present. This is the 'full assessment'.

PRELIMINARY ASSESSMENT

Verification has to be done whether the FMU contain landscape features, which determine concentrations of wild animals? This information can be provided by the local people, or from habitat surveys. Probably the forest manager collected most of this information as part of the forest management requirements. Special attention should be paid to the local knowledge – the forest manager should communicate with local people and record the information received from them. If the FMU contains forest areas with presence of any of the examples with important temporary concentrations listed in HCV 1.3 rationale, full assessment have to proceed.

FULL ASSESSMENT

1. Biodiversity assessment should include survey for concentrations of migratory birds. Have to make verification for existence of threshold values listed in *Annex 2.* The verification should include one or more specific activities aimed at establishing whether there is a concentration of migratory bird species within the indicated forest types. The survey should consist of the following steps:
    - Establish *when* the forest type(s) are likely to be used by migratory birds (with help of both local and expert knowledge)
    - Conduct one or more *field surveys* to identify the present species of migratory birds

- The field survey should use the best scientific *methods* (expert assistance might be needed)
- Both the *number* of species and the *population densities* should be estimated
- The survey report should include a full description of methods (with justifications) as well as the results.

- If a concentration of migratory birds is found, the forest manager should contact relevant experts or organizations to determine whether this constitutes a globally significant concentration.

2. If in the FMU are areas recognised as important temporal feeding or refuge areas, or separate groups of trees from the LFFF, which are used as sleeping areas from significant number of animals, or areas of reproduction importance, then the forest manager should conduct surveys looking for concentrations of species. Have to check for existing threshold values according to *Annex 2*. The survey should include recommendations as to whether any concentration is significant (local knowledge will be important to inform this decision).

RECCOMENDATIONS AND INSTRUCTIONS FOR MANAGEMENT OF HCV 1.3

1. The forest manager is responsible for clearly describing the specific HCV. For example, 'section X has two bear's dens inhabited by x bears" or "the rocks of subsection x inhabit bats colonies from species A and B with average number of C or D", or there is a pond in section X with approximate size of A x B meters and approximate depth of C meters" or "among the rock heaps within Subsection X, observations of Y snakes were recorded" or "X terrestrial tortoises have been observed within a small area of Section / Subsection X". Maps with spatial location of the HCV have to be created. Identify key information for each HCV. This should include: importance (global, provincial, local, etc.) of the temporal concentration (expert opinion); Current status of importantspecies that comprise the concentration; Main trends and threats to the maintenance of the forest type or habitat feature that contains the HCV; Potential management impacts over the forest or habitat feature as HCV.
2. Have to provide leisure conditions in areas defined by *Annex 2*, through stopping any forest activities when areas are used by species listed in *Annex 2*. During the rest of the year activities for protection of defined areas in compliance with species recommendations are implemented, the specific HCV is developed for their use according to National Plans for Management of the Species (NPMS).
3. If there is no NPMS for the species, for which is defined specific HCV, a management plan for HCVF is developed until its endorsement, complying with specific requirements of identified HCV. An expert for the specific HCV species participates in development of the Management plan.

✓ Develop concrete recommendations for management of each HCV. They may include active management, measures for recovery or strict protection, **according to**

particular conditions. It may be appropriate to define some key reserve areas, maintain landscape-level connectivity, and/or ensure maintenance of certain stand-level habitat features, such as canopy cover. ***For instance*** – Important Bird Areas. Regions and seasons of non-disturbance should be defined: 150 m, August- March. For amphibians – buffer areas are defined around water bodies (50 m in diameter around the water body) for seasons of non-disturbance: February – July (the period cound be extended to August depending on the geographical location). For aquatic turtles buffer areas of 100 m in diameter are defined around the water body for the period May-July. For reptiles seasons of non- disturbance are defined in the strip between the wood and open areas with a buffer of 40 m in diameter in the period April – June.

✓ Integrate management proposals into the broader planning process. HCVF management plan has to provide protection of defined HCV. Forest manager have to be sure that measures are actually implemented, for example through changing operational procedures and ensuring that a training programme has been completed. Training has to introduce restrictions caused by presence of HCV and measures for its protection.

Indicative recommendations for management of forests providing habitats for invertebrate species listed in Annex 1 to the Toolkit

Unlike most other animal species, saproxylic invertebrates are strongly attached to the habitat that is suitable for them, which in many cases may even be a single tree. They are highly specialized and a population of a species can survive many generations feeding and living in just one dead branch or one hollow, which makes them highly sensitive to negative changes and human impacts on forests.

- Maintenance of natural and semi-natural forests: with a diverse age structure, native tree species and a sufficient number of mature and decaying old trees in different stages of aging. Measures should be taken in the managed forests to ensure there is sufficient amount of trees of different ages, while leaving unaffected trees typical of the habitat. Species that are not typical for the place (alien species) should be thinned out or entirely removed. Certain places should be left unexploited where trees can grow old and die naturally. To maintain a sustainable use and preserve biodiversity, it is recommended to limit the amount of dead wood to 35 m3/ha (or 3-8% of the total volume of available wood) while leaving all the dead trees that have a diameter exceeding 22 cm.
- Presence of trees from all levels of thickness for the main tree species.
- Enhancement of fire prevention measures and control in forests.

- Study of the populations of beetles and butterflies and incorporation of data into forest management plans and activities.
- Identification and marking of biotope trees – both present and future.
- Preventive measures: trhough appropriate forest management ensuring a balance of trees in various age and structure and avoiding unnecessary sanitary logging. It is important to dispel the misconception that saproxylic invertebrates are "vermins" in the woods.
- Preservation of undergrowth and of ecotones – the border stretches between wood and open areas.

RECCOMENDATIONS AND INSTRUCTIONS FOR MONITORING OF HCV 1.3

1. This part of the HCVF management includes accomplishment of periodical monitoring and analysis of forest condition, through field observations and development and application of specific programme for each HCVF. For development and application of this programme consultations with experts are needed – environmental conservation experts, consultations and information can be received by relevant institutions (departments of Ministry of Environment and Water and National Forestry Board).
2. Monitoring program has to be developed due to standard operational procedures, which include clear indicators, appropriate for the management purposes. It can be conducted once or many times per year, if seasonal report is needed, for example if important events occurred in FMU only during specified months.
3. 3.Examples of key monitoring activities: Specific wildlife population trends; Habitat quality survey results; Local people's perceptions of the changes in the species status; Pre- operational planning checks; Other quantitative data provided by forest guards such as hunting records
4. When the HCVs include samples of natural ecosystems within a substantially altered landscape, features that help to maintain those HCVs within the landscape (e.g. corridors and buffers) should be monitored.
5. It is possible to found out during the monitoring process that management plans do not reflect real forest conditions, treats and trends. In this case have to make consultation with an expert, to define if there are gaps in plans and if current management model is critical for conservation of species representing HCV. If necessity

for more strict management regime is determined, areas with HCV 1.3 can be included in Action plan for biodiversity conservation within a bigger landscape site or can be included in protected areas.

HCV2. Landscape-level ecosystems and mosaics

The complete heading of HCV 2 is as follows: Landscape-level ecosystems and mosaics. Intact Forest Landscapes, large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

INTRODUCTION

Currently there is no legislation in Bulgaria regulating the definition of such criteria. Moreover – on a national level there are no credible scientific studies defining the minimum size of forest areas supporting viable populations of occurring species.

RATIONALE

Forests that contain viable populations of most or all native species should be large in size, and relatively unaffected by recent human disturbance and fragmentation (% of unfrosted areas). The identification of this conservation value aims at including typical landscapes from the forest-vegetation area and their biological diversity.

DEFINITION

HCV 2 are important forest areas, forming landscapes of regional or national significance, whereall naturally occurring species exist in natural patterns of distribution and abundance. With regional significance are those forest areas, which within the framework of the region are unique according to naturalness, fragmentation and minimum size of the area hosting vital populations of naturally occurring species. With national importance are those forest areas, which within the framework of the country are unique according to naturalness, fragmentation and minimum size of the area hosting vital populations of naturally occurring species.

CRITERIA AND TRESHOLD

During development of the criteria for forests distribution, according HCV 2 principle of forest- vegetation district is used. Forests, which meet this conservation value, are separated by criteria - naturalness, fragmentation and minimum size of the area hosting vital populations of naturally occurring species.

1. Naturalness – the forest consists of vegetation species with natural occurrence in the country, regardless of their origin.

2. Fragmentation – identification of the anthropogenic landscapes percentage within the described area and their spatial distribution.
3. Size of the area – based on the type of plantations, their geographical distribution and the area necessary for the normal vital activities of the populations of all naturally occurring species.

IDENTIFICATION OF HCV 2 PRELIMINARY ASSESSMENT

Potential forests complying with the requirements of HCV 2 have a clear geographical differentiation. Therefore as a first step the geographical region should be identified. Potential regions are: the Pirin, Rila, Rhodope, Vitosha and Strandja Mountains, the Danube Hilly Plain, the Balkan and Fore-Balkan Mountains, Western bordering mountains and Belasitsa.

The altitude of the described area determines the potential geographical objects, which can be fully assessed. As a second step the geographical objects are identified according to the altitude Strandja Mountains, the Danube Hilly Plain, the East part of the Balkan and Fore-Balkan Mountains at the altitude to 1000 m. The Pirin, Rila, the Balkan (without East part) and Rhodope (without East part) at above 1000 m.

The forest type is determined according to the tree species that form the forest. Tree species form pure or mixed plantations, and either of them might dominate. As a third step tree species are identified: they have to be naturally widespread in Bulgaria**.**

FULL ASSESSMENT

Table.2.1: Identification according to the table with criteria parameters.

Forest	% Naturalness	% Fragmentation	Min. Size, ha
Strandja Mountains, the Danube Hilly Plain, the East part of the Balkan and Fore-Balkan Mountains	70	7	40 000
The Pirin, Rila, the Balkan and Rhodope	80	5	50 000

According to the above criteria the full assessment of the forests in Bulgaria is developed and the all FMU come under this HCV are identified. The data is presented in a table to the forestry section level in State FMU and are given in *Annex 3*.

The complete information concerning the development of HCV2 and the graphical materials and maps are available on a magnetic wearer and can be provided from the State FMU or WWF Bulgaria office in Sofia, e-mail: office@wwfdcp.bg; fcic@wwfdcp.bg

RECCOMENDATIONS AND INSTRUCTIONS FOR MANAGEMENT OF HCV 2

1. Planned forestry activities should not decrease the forest cover of the area.
2. Forestry systems should maintain a complex forest structure of different ages and on landscape level. Environmental and various forestry systems have to be used according to specific characteristic of each plant.
3. Not less than 5 % from forests from main presented tree species in the FMU territory or part of them belong to HCV2, have to be separated for Old-growth forests. Detail recommendations for Old growth forests management are given in *Annex 4A*, table 15.
4. The ecological principles and practises during planning process and forestry activities have to be observed.
5. Priority is given to natural regeneration. Have to implement forestry systems, which provide natural regeneration.
6. The root tree composition of the plantations is not permitted to be changed even during the reconstruction activities. This is applied also when the reconstructions are made for plantations over poor habitats.
7. Only local species and origins are used for restoration (afforestation) activities. In areas with identified HCV 2 non-local tree species and origins should not be introduced, excluding dendrariums and geographical cultures, as well as animal species outside their natural area of distribution, excluding State Game-Breeding Stations.
8. Artificial forestation on natural open areas in wooded lands is not permitted, with exception of the anti erosion activities.
9. Activities (including forestry activities) that increase the anthropogenic fragmentation of the area are not allowed, even if the current percent is below the defined in the respective criterion. Roads and infrastructure planning have maximum to maintain landscape integrity. Appropriate elements have to be provided, decreasing fragmentation influence of the area, which will provide animals movement –for example planning of corridors for movement, connections and leisure zones for animals and etc.

RECCOMENDATIONS AND INSTRUCTIONS FOR MONITORING OF HCV 2

1. The quantitative indices of all three criteria – naturalness, fragmentation and size of the area - should be followed during the monitoring. Quantitative indices should correspond to the values in the full assessment table, for all of the identified forest-vegetation areas.
2. Monitoring of documents should be carried out annually. Current forestry plans, management plans, spatial management plans have to be used and also procedures related to alteration in the purpose of lands and forests from the forest fund, etc.
3. Control over implementation of timber activities have to be done.
4. Once in every 5 years a field sites revision should be carried out, in which activities related to any of the criteria are implemented. Consultations with communities and relevant authorities to ensure that they are aware of each other activities, and work to mitigate potential future threats such as illegal logging, wildcat mining, and unsustainable agriculture.
5. Have to make monitoring over influence of anthropological external threats, for example fires, as a monitoring of conditions for occurring of extreme events, for example pest attacks or others and for implementing of preventive measures when it's possible.

HCV 3. Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats or refugia.

The complete heading of HCV 3 is as follows: Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats or refugia.

INTRODUCTION

Up to now no full assessment of ecosystem types has been conducted in Bulgaria. There is also no assessment of threatened or endangered ecosystems. In the past (in the 60-ies and 70-ies of XX century) the method of forest typology was developed, but later on it was abandoned in favour of habitat features (soil richness and humidity) typologization. A significant part of the unique Bulgarian forest ecosystems are included within protected areas. Protected forests, however, cover a much smaller area than the actual area

of high conservation value forests. Unfortunately the protected areas statute not always means implementation of adequate measures for the protection of rare forest ecosystems.

RATIONALE

HCV3 focuses on ecosystems, which are representative for particular forest types Some forest types are naturally rare in the country and the aim of this HCV is to provide protection for threatened or endangered ecosystems, which they present. This includes mainly forest types which were previously widespread or typical for wider region.

If most of these habitats outside the FMU are cleared, the importance of these ecosystems inside the FMU increases, which means that they will need tighter management, or perhaps protection. It is therefore in the interest of FMU managers to both monitor what is happening to the ecosystems they manage in the wider landscape, and to help mitigate the threats they are under. Rare, threatened and endangered ecosystems in Bulgaria, which include forest areas, are listed in *Annex 4* to the toolkit. The list of ecosystems in *Annex 4* is done according to the European classification EUNIS.

DEFINITION

All LFFF in Bulgaria including representatives of habitats listed in *Annex 4* should be considered as HCVs. HCV forests are also those with characteristics, distinguish them as Old growth forests, with their age structure and natural level, which are habitats for complex species from specific ecological and taxonomic groups.

CRITERION AND TRESHOLD

All forests complying with the characteristics in Annex 4 have HCV 3. Nevertheless Old growth forests (OGF) don't fall into Annex 4 list, all forests which have characteristics, distinguishing them as being in a stage of Old growth forests must also be identified as HCV 3.

According to the definition for Old Growth Forests (OGF) in the National FSC Standard, OGF are forests in the final stage of their development where the stand has reached a considerable age, not significally affected by large-scale natural disturbances and human impacts, and features uneven spatial and age structure; presence of old live trees with diameters close to the maximum for the relevant tree species and habitat; standing and fallen large dead trees in various stages of decay.

PRELIMINARY ASSESMENT

As part of the forest management process, the forest manager should already know which forest types are present within the FMU. This information is now analysed to identify potential forest regions in the FMU that are in, or contain threatened or endangered ecosystems according to *Annex 4*.

During the survey of existing HCV 3 very useful for the forest managers will be consultation with all existing maps of forest types within the FMU. Environmental experts can provide consultations to guarantee that habitats comply or not with described in HCV 3 definition and for those in *Annex 4*, consultations and information can be received from related institutions (Departments of National Forestry Board, Ministry of Environment and Water)

FULL ASSESMNET

If the existence of HCV areas in FMU is identified or potential, field observation have to be carried out for identification of accurate borders of HCVF. After defining the borders, they are mapped on the FMU map, the data have to be put in the planning activity documentation, as well in a following forest management on the area of FMU. With a view to the above the following examples can be indicated for identifying HCVF by HCV 3: Existence of Black Alder forests or natural Austrian Pine forests, or natural forests of Pinus peuce and Pinus heldreichii or others according *Annex 4*, all of them are HCVF. Their accurate borders have to be defined on the field and should be mapped on the FMU map and take them into account during forest management and planning activities in the area, in order to provide protection and extend (of possible) of HCV.

Recommendations for management of HCV3 forests are given in *Annex 4A*. RECCOMENDATIONS AND INSTRUCTIONS FOR MANAGEMENT OF HCV 3

This part of the HCVF management includes accomplishment of periodical monitoring and analysis of forest condition, through field observations and development and application of specific programme for each HCVF. For development and application of this programme consultations with experts are needed – environmental conservation experts, consultations and information can be received by relevant institutions (departments of Ministry of Environment and Water and National Forestry Board).

1. Monitoring program has to be developed due to standard operational procedures, which include clear indicators, appropriate for the management purposes. It can be conducted once or many times per year, if seasonal report is needed, for example if important events occurred in FMU only during specified months.

2. During fieldwork the following indexes are observed, vitality of each tree, plantation structure, state of health, existence of degeneration processes, frequency, size and location of empty spaces, fragmentation levels, basal area, succession presence and its direction and etc. and/or remote sensing interpretation of received data.
3. The threats for these HCV 3 forest types have to be specified and how severe they are, and management measures required to decrease them have to be identified.
4. Successful implementation of monitoring measures require training of the employees, involved in forest management activities, all have to be aware of the restrictions concerning the HCV presence and measures taken for its protection.
5. During the monitoring process is possible to found out that management plans do not reflect real forest conditions, treats and trends. In this case consultation with an expert have to be made, to determine if there are gaps in the plans and if current management model is critical for this ecosystem type conservation. If necessity of change to more strict management regime is determined, areas with HCV 3 can be included in Action plan for biodiversity conservation within the framework of bigger landscape site or can be included in protected areas.

HCV 4. Critical ecosystem services.

The complete heading of HCV 4 is as follows: Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

RATIONALE

This HCV pertains to the important functions of the managed forest. Examples of identified HCV components include:

- Forests unique sources of drinking water
- Forests critical for water catchments
- Forests critical for erosion control
- Forests providing a barrier for fire
- Forests with critical impact on agriculture and aquaculture

HCV 4.1 Unique sources of drinking water

RATIONALE

Many sources of drinking water for entire communities or settlements depend mostly on forests. These are surface or underground sources, like streams, rivers, lakes, springs

or wells. If the forest protects and maintains water supplies for people or communities who have no alternative sources of drinking water, then this will always be critical.

DEFINITION

In Bulgaria HCVs are all LFFF falling within sanitary guarded areas 1 and 2, which supply water for drinking and other daily needs and are regulated under Regulation 3, 2002. HCVs are also LFFF adjacent to sources of water for drinking and other daily needs, but without officially identified sanitary guarded areas.

IDENTIFICATION OF HCV 4.1

1. The local water economy companies supplying drinking water have to be contacted, or the competent Basin Directorate to MoEW, in order to identify the existing sanitary guarded areas for drinking water sources in the specific forest management unit.
2. In case there is no centralized water supply for a settlement or for a separate property, the local stakeholders within and around the forest management unit have to be identified. Detailed consultations with local communities have to be carried out to identify critical locations of water sources (critical springs, headwaters, and other sources of drinking/daily water.)

Identify whether the communities have access to alternative sources of water that is not dependent on the FMU (for example piped network bringing water from a source outside the FMU). Check whether this access is available all year long.

Identify and map the location of important community sources of water for drinking and other daily needs, as well as the level of protection that is provided. Typical examples are:

- ✓ Rivers and streams flowing from or through the forest area and supplying water for the community;
- ✓ Springs located in the forest or affected by the forest area, used directly or through a piped network;
- ✓ Wells located in the forest, or deriving water from a water table affected by the forest.

The manager/forest user has to conduct a needs analysis (possibly in conjunction with HCV 6) of important water sources.

The water catchments area, the water source, has to be identified, and whether it is partially or entirely located within the forest management unit.

Identify whether the forest cover affects the quality or quantity of these water sources.

RECOMMENDATIONS AND MANAGEMENT GUIDANCE FOR HCV 4.1

1. The forest manager has to comply with the management and conservation regimes, regulated under Regulation 3, 2002, concerning sanitary guarded areas surrounding sources of drinking and other daily needs water.
2. When there are no established sanitary guarded areas of drinking water sources, the requirements of HCV 4.1 have to be used. Specific management and protection measures have to be developed, complying with the requirements in Regulation 3, 2002. These are some general recommendations for forestry activities:

- ✓ Support the establishment and maintenance of mixed plantations with uneven spatial structure;
- ✓ Forestry systems have to be used, which provide permanent forest cover in forested water catchments;
- ✓ The density/fullness of plantations in the water catchments have to be up to 0.5, and not above 0.8, because in this case the percentage of evapo-transpiration grows;
- ✓ Prohibition of bare loggings;
- ✓ Areas close to the water sources have to be managed more carefully, the land surface has not to be damaged during timber transporting, timber logging have to be least intensive or not carried out at all.

3. The staff involved in forestry activities has to be trained according to the limitations caused by the identified HCVs and measures for their protection.
4. The forest managers have to search compensations for missed benefits or extra costs of the forest management during the process of sanitary guarded areas development

RECOMMENDATIONS AND GUIDANCE FOR THE MONITORING OF HCV 4.1

Forest managers shall make use of the water monitoring carried out by expert bodies – RIEW, or water economy companies.

HCV 4.2 Forests critical for the regulation of water flow in catchments

RATIONALE

Forests are substantial factor for maintaining terrain stability and controlling erosion. They have an important role in preventing flooding, controlling stream flow regulation and water quality.

Where the forest covers large area from the water catchments, it has a critical role in maintaining the water quantity and quality. The greater the importance of the water catchments in terms of flooding or drought risk or water usage, the more likely the forest is crucial for maintaining these functions and more likely that the forest is a HCVF. Sometimes forests protect against erosion and landslides areas where the consequences, in terms of loss of productive land, damage to ecosystems, property or loss of human life, could be severe. In these cases the ecosystem service provided by the forest is critical and it should be considered as HCV.

DEFINITION, CRITERIA AND THRESHOLDS

In Bulgaria the following LFFF are HCVs:

- LFFF included in the water catchments areas of torrential water currants, whose forest cover exceeds 40%;
- *Pinus mugo* communities*;*
- LFFF forming the high forest border (HFB) and regulated under the Forests Act, or included in the 200 m belt below the HFB;
- Natural riparian forests of *Q. pedunculiflora, Q. robur, Fr. oxycarpa, Ulmus minor, U. laevis, Salix alba, Alnus glutinosa, Popolus alba, P. nigra, Platanus orientalis,* included in the flooded terrace of river currants;
- Forests between the dyke and the right bank of the Danube, island forests and the 200 m belt from the high riverbank;
- Forests in the 100 m belt of Maritza, Toundja, Mesta, Strouma, Arda, Lom, Tzibritza, Ogosta, Skut, Iskar, Yantra, Vit, Sazlijka, Stryama, Ossam, Roussenski Lom, Kamchiya, Veleka and Rezovska (the Bulgarian part of it) Rivers;
- LFFF included in sanitary guarded area 3 of drinking water dams, regulated under Regulation 3, 2002.

IDENTIFICATION OF HCV 4.2

1. Identify whether the forests fall within any of the HCV 4.2 definitions.
2. Identify forests in the FMU, included in catchments areas of torrential water currants (with irregular alterations in the water flow, depending on the intensity and quantity of rains).

Sources of information could be the Hydro-meteorological Stations – for the water flow, Civil Protection departments and municipalities - for torrential activities. Examples for potential HCVFs are forests in the hydrographical system of all internal rivers, forests at the high forest border and forests in dam catchments areas.

3. In case such forests are identified, check past torrential activities (flooding) and their character.

RECOMMENDATIONS AND MANAGEMENT GUIDANCE FOR HCV 4.2

1. The locations of all potential HCV areas in the FMU have to be mapped. It is recommended to use forest management materials and consult the experts. Field check has to be done in order to ensure accuracy of the mapped information.The identified forests with water protection and water regulation functions are mapped.
2. Management activities have to be carried out in compliance with the Rules for Identification, Organization and Management of Forests and Areas with Special Designation. The planning and forestry activities in HCVF have to maintain and improve HCV 4.2. These are some general recommendations for forestry activities:

- ✓ Forestry systems providing permanent forest cover in forested water catchments have to be used in order to decrease the surface water flow;
- ✓ If appropriate afforestation activities increasing the forest cover of the water catchments have to be carried out;
- ✓ Support for the establishment and maintenance of mixed plantations with uneven spatial structure;
- ✓ The density/fullness of plantations in the water catchments have to be above 0.5;
- ✓ Prohibition of bare loggings;
- ✓ Technological schemes and equipment have to be used to provide minimum damage of land surface during timber transportation;
- ✓ When forestry activities are finalized, rehabilitation of damaged areas (i.e. forest skid trails) have to be carried out;
- ✓ No forestry activities have to be carried out at *Pinus mugo* communities.

3. The staff involved in forestry activities has to be trained according to the limitations caused by the identified HCVs and measures for their protection.

RECOMMENDATIONS AND GUIDANCE FOR THE MONITORING OF HCV 4.2

An adequate monitoring system has to be organized and implemented for forests containing HCV 4.2. The water monitoring carried out by expert bodies can be used – RIEW, or water economy companies.

HCV 4.3 Forests critical for erosion control

RATIONALE

The LFFF of the following regions and soil types are potentially endangered by the development of erosion processes:

Regions:

- Erosion process: The ridges and Southern slopes of the Balkan, Rhodope, Rila, Pirin, Vitosha, Belassitza, Ograzhden, Malashevska, Ossogovska and Konyavska Mountains.
- Avalanche processes: The Central Balkan, Rila, Pirin, Vitosha, Ossogovska Mountain and West Rhodope slopes.

Soil types (The forest management classification is used)

Maroon forest soils, brown forest soils, mountain-forest dark-coloured soils, mountain-meadow soils, humus-carbonate soils, alluvial and delluvial soils, anthropogenic soils, under-developed and degraded soils. (Primitive Soils category of FAO)

DEFINION, CRITERIA AND THRESHOLDS

In Bulgaria the following LFFF are HCVs:

- LFFF with slope above 30^{o} (or less, in case they are under the water-fusion area with slope above 10^{o} and length above 200 m) with a total area above 1 ha and tree density/fullness over 0,6;

- Forests grown under technical projects for erosion control, regulation, bank-protection and wind-protection forest belts;

- Forests protecting settlements or communication structures, lie on the path of already fall avalanches (data from the Mountain Rescue Service), forests into the snow catchments areas with slope above 20^{o}, forests situated under a deforested snow catchments area with length over 200 m and slope above 20^{o};

IDENTIFICATION OF HCV 4.3

1. Identify whether the forest covers some of the HCV 4.3 definitions.
2. Identify sites with slope above 30^{o} in the territory of the forest management unit. Information about this can be collected from forest

management materials and field checks. Relevant bodies or experts could also be contacted.

3. Snow catchments area covers territory with slope above **20^{o} - 60°** providing formation of snow cover with above 0,5 m depth. Information concerning potential avalanche dangerous areas can be received from the Mountain Rescue Service. Monitoring of the opposite slopes is recommended.
4. Typical examples of forests containing HCV 4.3 are:

✓ Forests above 1500 m altitude.

✓ Forests located on:

- heavily cracked rocks;
- areas with weak connections between the elements in the main rock;
- areas with intensive weathering processes of the main rock;
- peripheries of plateaus;
- banks of water currants, which prevent the digging under the slope bottom;
- LFFF in the list with avalanche dangerous areas according the Mountain Rescue Service data.
- Areas with already felled avalanches can be recognized by: deciduous forest or young coniferous forest strips lay on the slope direction, and on steep slopes in older coniferous forests.

RECOMMENDATIONS AND MANAGEMENT GUIDANCE
FOR HCV 4.3

1. The management of forests with HCV 4.3 have to comply with the requirements of FA about forests with special designation and aim the prevention of erosion processes.
2. The planning and management activities in HCVFs have to comply with HCV 4.3. General recommendations for forestry activities are:

In forests with crucial anti-erosion importance:

✓ When the plantation from the HCVF 4.3 list has one or more additional purposes (for example forest resort), the forestry activities have to achieve balance between them but the anti - erosion function is a priority;

✓ Have to be used forestry activities which provide permanent cover with forest of the wooded lands, as the density/fullness of plantations have to be above 0.5

- ✓ Mainly forest thinning and sanitary loggings have to be carried out;
- ✓ Rejuvenation loggings are allowed in forests with fast regeneration of sprout tree species;
- ✓ Bare loggings and short-term gradual loggings shall not be carried out in very steep areas (31-45^{o});
- ✓ In stony and ravine areas (above 45^{o}) all forestry activities are forbidden;
- ✓ Equipment and technologies for bare loggings shall cause minimum damage to the vegetation and soil cover.
- ✓ If appropriate forested activities are provided as the native tree species have the priority;

In forests with crucial importance for prevention of landslides and screes formation:

- ✓ Loggings are not allowed;
- ✓ Activities providing additional vegetation have to be carried out;
- ✓ Activities strengthening the stability of the slope bottom during water currants are envisaged (including the construction of technical equipment forming a balance profile).

In forests preventing the avalanches:

- ✓ The assessment of plantation stability is important and measures for its strengthening if needed;
- ✓ If forestry activities are needed than cautious intervention with low intensity are recommended;
- ✓ Bare loggings are forbidden;
- ✓ Wide-open areas should not be created during the regeneration cutting as well as open areas on the slope direction;
- ✓ Set up and maintain plantations with different ages with group structure and maximum density;
- ✓ Activities providing appearance of additional vegetation;
- ✓ Activities in mountain pine formations are not allowed;

3. Skid trails, log yards and clearings needing rehabilitation have to be identified and mapped. When timber production is finalized, relevant restoration activities have to be carried out, according to the terrain damage.
4. Developing of management plans or rules for rehabilitation of damaged or other areas, threatened by erosion and/or areas where the monitoring indicates high levels of erosion.

5. The staff involved in forestry activities has to be trained according to the limitations caused by the identified HCVs and measures for their protection.

RECOMMENDATIONS AND GUIDANCE FOR THE MONITORING
OF HCV 4.3

1. An adequate monitoring system should be developed and implemented for forests with HCV 4.3. It is recommended that RIEW experts are contacted and consulted.
2. In forests with crucial anti-erosion importance short-term and long-term monitoring have to be carried out:
   - ✓ Short-term – current erosion activities (damaged areas). Annual monitoring;
   - ✓ Long-term – the depth of soil profile and dead forest cover (DFC) are measured. Monitoring– each 10 years.
3. In forests preventing landslides and screes the dynamics of the following parameters is monitored:
   - ✓ For existing screes – volume of accumulated materials is measured;
   - ✓ Area dynamic of the landslide;
     - ✓ Volumetri

     c dynamic of the
     destroyed area.
     Annual monitoring
     is carried out.
4. In forests preventing the formation of avalanches existing avalanche activities are monitored. Annual monitoring is carried out.

HCV 4.4. Forests providing a barrier for fire

RATIONALE

Fires are part of the natural dynamics of forest ecosystems. Forest fires, whether originate from natural or anthropogenic causes, can transform into destructive and uncontrolled fires that can be a serious threat to human life and property, economic activity, or endanger ecosystems or species.

Fires have serious and continuing impact on Bulgarian forests during the last 10 years. The importance of protection of all Bulgarian forests from further fire damage is recognized. A single plantation in a key position can prevent fire spreading to other areas. Well growth and dense deciduous forest is more fireproof than sparse deciduous or

coniferous forests because of the fall of leafs and decaying. During the big fires the deciduous forests have the biggest leaf density and in the same time the leafs felled during the last fall are in first stage of decay, therefore there is no enough inflammable material compared for example to coniferous forests. Other point of view is that the forest has to be very well growth, with dense crowns cover thereby will restrict the grass and bushes growth as storeys. This supposed restriction of activities, which decrease the crown cover; leave easy flammable wastes and cause appearance and growth of vegetation in down storeys until the full forest coverage is completed.

DEFINITION

All deciduous forests among coniferous plantations, between coniferous plantations and settlements, and between coniferous plantations and lands with different agricultural uses, that are minimum 100m and maximum 250 m wide and include deciduous species except Birch, Robinia and poplar hybrids/cultivars), are HCVF.

IDENTIFICATION OF HCV 4.4

1. Identify fire expertise relevant to the region of the forest management unit and obtain information on fire history, causes and forecasts. For more information contact relevant authorities or experts, review maps relevant to the wider landscape, review forest management materials, collect information from field visits.
2. Determine whether there is a trend of development of large-scale fires near or bordering the FMU.

RECOMMENDATIONS AND MANAGEMENT GUIDANCE FOR HCV 4.4

1. Ensure the integrity of forests against fire threats. Forests that are fragmented, with open canopies, or have experienced high harvesting intensities, are more prone to fire damage.
2. The deciduous composition in the existing deciduous forests strips has to be preserved and maintained. The tree density/fullness in them have to be above 0.7.
3. In case no such strips exists, relevant afforestation schemes have to be used for establishment of buffer zones with fire resistant tree species.
4. Development of fire fighting plans, including standard operating procedures for fire fighting and training of the staff, complying with the forest legislation in the country.

RECOMMENDATIONS AND GUIDANCE FOR THE MONITORING OF HCV 4.4

The monitoring of HCV 4.4 shall include frequency and area spreading of burnings and fires in the forest management unit.

HCV 4.5. Forests with critical importance for agriculture

The complete heading of HCV 4.5 is as follows: Forests with critical importance for the protection of agricultural activities (agriculture, aquaculture) and infrastructure sites

RATIONALE

Where forest areas are close to agricultural lands, fishing or tourist regions, or include main habitats of fishes, their impact can sometimes be crucial to maintain the resources or economic production. The forests impact will vary according to the climate and topography, spatial configuration of the agricultural land and the forest, as well as the crops types. Forests influence also the fish resources in water bodies located in them or passing by. The consequences from agricultural, aqua and fish production loss as well as tourist income will also vary depending on the social and economic circumstances. Communities whose agriculture or fishery is the main livelihood are particularly vulnerable from production loss. Forests established particularly for the protection of engineering equipment have critical importance for maintenance of economic activities and existing infrastructure sites. Their crucial importance and meliorative influence includes stabilization of environment, surrounding engineering equipment, development of optimum regime for isolation of vehicles, accumulation of toxic substances, noise insulation and decrease of evaporation from inter- canal areas.

This element of HCV4 aims to identify forests that have crucial importance in maintaining the services on which depend the agricultural production and fish supply and engineering equipment**.** Potential for critical impacts over agriculture and fish resources could have forests located within arable lands in the regions of the Danube Plain, Dobroudja and Eastern Trakiya (Thrace), as well as floodplain forests along the banks of all rivers and the upper reaches of rivers, which are fish reproduction sites. Forests protecting engineering equipment include: 100 m wide forest strip on both sides of railways, motorways and gas-pipes, 50 m wide strip along first-class roads, 10 m wide strip on both banks of irrigation channels, etc.

DEFINITION

All forests with crucial influence over forest functions, on which depends agriculture, fish resources and protection of engineering equipment, are HCVFs when they are:

1. Forest strips, adjacent to arable lands, that have been created as, or function as field- protection forest belts, and are up to 100 m wide;
2. Riparian forests dominated by different *Salix* species along the Danube bank and on the Danube Islands, flooded at high water, as well as along the banks of Maritza, Tundja, Mesta Strouma, Arda, Lom, Tzibritza, Ogosta, Skut, Iskar, Yantra, Vit, Sazlijka, Stryama, Ossam, Roussenski Lom, Kamchiya, Veleka, Rezovska (the Bulgarian bank of it) Rivers.
3. Forests planted for the protection of engineering equipment.

IDENTIFICATION OF HCV 4.5

1. Identifying whether there are forests complying with HCV 4.5 requirements in the FMU. Sources of information can be forest management plan, maps of forest areas, land use maps, social research, consultations with communities and stakeholders in or adjacent to the FMU, data from the field work.

RECOMMENDATIONS AND MANAGEMENT GUIDANCE FOR HCV 4.5

1. Any threats of key forest functions from FMU operations have to be assessed. After the assessment consultation with communities and relevant experts and bodies has to be organized, to determine how external activities affect critical forest areas, and take measures to mitigate potential future threats.
2. Measures for the protection or restoration of damaged areas have to be developed after the assessment of external threats.
3. The most effective in practice for the forests planted or functioning as field-protection forest belts is the openwork (blow through) field-protection belt. Management should be orientated to creation anmaintenance of openwork belts through development of tree (upper) and shrub (lower) storey. If the length distribution is regular the openwork along the whole height should be no less than 30%.
4. The state of fish resources is crucial for riparian forests through the fact that riparian forest communities are vulnerable to disturbances, no economic activities have to be planned or implemented in them. Protection and restoration activities for riparian communities have to be planned.

5. The forest thinning in forests protecting engineering equipment have to be carried out with moderate intensity. Restoration activities have to provide gradual transition between the old and the new forest generation, which shall not decrease substantially protection functions of the forest – only loggings with a long restoration period have to be implemented.

RECOMMENDATIONS AND GUIDANCE FOR THE MONITORING OF HCV 4.5

Adequate system for monitoring of critical forest areas has to be organized and implemented for HCV 4.5 forests. Updated maps and information from field wok have to be used. Monitoring of the yields of arable lands and fish resources in critical areas is needed.

HCV 5. Community needs.

The complete heading of HCV 5 is as follows: Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for example for livelihoods, health, nutrition, water), identified through engagement with these communities or Indigenous Peoples

INTRODUCTION

Many conservation categories assumed that people always goes against forests. The definition “high conservation value forests” (HCVFs) differ from them because it recognises that some forests are essential to human wellbeing. The value aims protection of the livelihood and safety of local communities derived from forests - not only for “forest-dependent communities”, but also for any community that gets substantial and unique amounts of income, food or other benefits from the forest.HCV5 applies only to basic needs without other alternatives.

RATIONALEA

A forest may be a HCV if local communities obtain essential fuel, food, fodder, medicines, or building materials from it, without other easy available alternatives. In these cases, the High Conservation Value is specifically identified as one or more of these basic needs.

Employment, income and products are values that have to be protected, if possible, without prejudice to other values and benefits. However, HCVs concept does not include over exploitation of the resources, even when communities are currently economically dependent on it. Over exploitation during application of traditional practices is also not tolerated, if they damage or destroy the forests and their values.

The following forests are not HCV 5:

- Forests providing resources of minor importance to local communities.
- Forests providing resources that could easy be obtained elsewhere or that could be replaced by substitutes (livelihood, income from activities or subsidies – agriculture, crafts, services, industry, trade, social assistance, etc.)
- Forests providing resources that are extracted at unsustainable levels (unsustainable use, over exploitation, inappropriate activities).
- Forests providing resources obtained using a method that threat the maintenance of other HCVs.

Specific value may expand or decline over time, through changes in community needs and land use type. Specific forest, which was previously only one of many sources of supply, may become the only one, or the basic source of fuel wood or other products. The opposite can happen - the needs may decrease and disappear after a time.
In Bulgaria communities living in and adjacent to forest areas have a varying degree of dependency on forest resources. It can differ with regard to their traditions and history, but mainly with regard to their way of life, developed infrastructure, the distance to other settlements.
The assessment of alternative sources availability may be a delicate question. Communications and market access are important factors. Isolated communities are likely to have few market options and reduced access to alternative technologies to replace their forest-dependant livelihood model. Communities with easy market access and easy communication with traders and government services can easier shift to new livelihood type. However, this may be limited by access to land, technology and capital. The all factors have to be carefully considered, and if doubt appears have to be considered that people do not have accessible substitute.
Another delicate moment is to make evaluation of the extent to which the use of forest products by the communities is sustainable and consistent with protection of other HCVs. As mentioned above, unsustainable levels of extractions cannot be considered as HCVs, as well as activities that threat HCVs 1 to 3 elements, for example over exploitation,

hunting or collection of endangered species. Consultations with ecological experts and sociologists are recommended in order to determine these interactions.

DEFINITION

The following resources can characterize HCV 5 in Bulgaria according to the community dependency level on them, existence of easy accessible substitutes and interaction with other HCVs:

- Firewood and wood for other daily needs

- Mushrooms
- Pasture and fodder – hay and leaf mass
- Other non-timber resources – medicinal plants, forest fruits, snails, products from hunting and others (non- timber forest products for trade including animals, resins, fruits, etc.)
- Water supply (water for drinking and for other daily needs (see HCV 4.1.)

Considering the existing sociological researches and following the implementation of a number of questionnaires and expert assessments, the present toolkit assume that as a whole the population in Bulgaria has alternatives according to exploitation and incomes from forests and therefore HCV 5 is not clearly represented in the country. However since as a substantial part of Bulgarian forests located near small and isolated mountain settlements having a potential for HCV 5 than the managers/forest users in these regions have to check the HCV 5 availability.

IDENTIFICATION OF HCV 5
PRELIMINARY ASSESSMENT
This assessment complies with *Annex 5* from the toolkit.

If the studying forests comply with the HCV5 requirements from *Annex 5*, then the toolkit users have to consult the local authority and local community representatives (religious, tribal or other informal leaders) according to HCV 5 presence. The forest managers have to receive the statement of local authority and informal leaders about the importance of forest for the local communities livelihood.

If there is potential existence of HCV 5 according to the *Annex 5* methodology and local authority confirms this also and informal leaders statements then forest managers/users are obliged to make the full assessment for the existing HCV 5 establishment.

The full assessment for the existing HCV 5 establishment is obligatory also when there are obvious conflicts between forest manager/user and local authority.

FULL ASSESSMENT

This assessment is made according to the developed methodology in *Annex 6*.
RECOMMENDATIONS AND GUIDANCE FOR MANAGEMENT AND MONITORING OF HCV 5
The recommendations and guidance for management and monitoring of HCV 5 forests are presented also in
Annex 6.

HCV 6. Cultural values.

The complete heading of HCV 6 is as follows: Cultural values. Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples, identified through engagement with these local communities or Indigenous Peoples.

INTRODUCTION

As well as being essential for human livelihood and survival, forests can be crucial for cultural values of the societies and communities. This value is designed to protect the traditional culture of local communities where the forest is crucial to their identity. Thereby maintenance of cultural integrity of local communities and society as a whole is provided.

RATIONALE

A forest may be designated as HCVF when having or providing values without which the local community would suffer a severe change in culture or for which the community does not have any alternative. According to the regulations in the country, about 40 000 cultural heritage sites in Bulgaria have the status of cultural monument (immovable cultural heritage). Some of these are located in forests or are closely related to woodlands. At the same time, certain sites in woodlands are important for the cuture and the historical

memory of local communities but are not classified by state authorities. Due to the specific socio-economic conditions in Bulgaria, the development of various forms of tourism (ecotourism, educational tourism, hiking, photo-safari, etc..) that are directly related to forest areas is of key importance for many local communities, including for promoting and preserving the local traditions and culture. In this sense, HCV 6 includes forest areas that are of importance for tourism when it supports and fosters the preservation of local traditions, customs and culture.

DEFINITION

1. Forest areas within a strip of 500 m around religious sites listed in Annex 7;
2. Forest areas within a strip of 100 m around monastreries and other religious sites not listed in Annex 7 (churches, chapels, shrines, holy springs, tekkes, etc..), ancient temples, occult centers, archaeological monuments and excavations and other sites identified in consultation with local people that are important for preserving spirituality, traditions and historical and cultural memory;
3. Forest areas within a strip of 100 m around sites traditionally used for fairs, singing competitions and other events identified in consultation with local people that are important for preserving the cultural heritage and national traditions;
4. Forest areas within cultural heritage sites (cultural monuments) or within their protection areas;
5. Forest areas located in the immediate vicinity (within a 30 m strip / 15 m on either side of the trail) along officially marked hiking trails and unmarked but commonly used hiking trails;
6. Forest areas within a strip of 50 m around tourist sites, as well as forest areas of outstanding aesthetic and

recreational value (including single trees or small groups of trees – e.g. venerable or remarkable trees), fountains, alcoves, educational trails and other sites important for tourism and education identified in consultation with local people and tourist groups, associations and companies active in the region.

IDENTIFICATION OF HCV 6 FULL ASSESSMENT

Identification of forest areas matching the definition of HCV 6 begins with checking whether the managed / utilized forest areas or parts of them are listed in Annex 7.

The list under Annex 7, however, should not be considered exhaustive – it needs to be updated in the course of time and users of this toolkit should therefore carry on with the next steps for identifying the existence of HCV 6 in consultation with local communities. The

groups of indigenous peoples whose traditional cultural identity is linked to the forest shall be identified and their representatives shall be consulted as to any occurrence of HCV 6 in the forest!

It shall be checked whether the forest areas are within the boundaries of immovable cultural heritage sites (monuments of culture) or in their areas of protection designated under the relevant legislation (HCV 6, item 4). This can be achieved as the forest owner / operator submits an application form to the Director of the National Institute for Immovable Cultural Heritage (NIICH). Templates of application forms are available on the website of NIICH. Information about the status of a forest area under HCV 6, item 4 may be obtained from the municipality, the city-hall (Culture Department) or the local museum (of history, ethnography), as well as other institutions related to the Ministry of Culture. In any case, an official certificate shall be issued by the relevant institution, authorized to this end, which consults with the National Scientific and Documentary Archive in NIICH. It is necessary to get official information about the applicable regimes for the relevant site of immovable cultural heritage. Available information might also be obtained from the local communities, NGOs or scientific institutions.

The assessment for identifying HCV 6 can be considered complete if consultations with key representatives of the local community are undertaken to identify, among others, the sites of importance for the culture and traditions that are not explicitly listed to the state regulations.

For identifying HCV 6, item 5 and item 6, it is essential to have consultations with tourist groups, associations and companies that are active in the area. For the purpose of identifying the archaeological sites under HCV 6, item 2 and item 3, it is also necessary to have consultations with local, regional and national historical and archaeological museums, archaeological, historical and ethnographic museums, cultural centers and institutes, community centers, mayors, informal local leaders, local historians, cultural anthrpologists and other stakeholders.

RECOMMENDATIONS AND MANAGEMENT GUIDANCE FOR HCV 6

1. Forest operations are carried out according to the regimes stipulated in the orders for promulgation of the cultural heritage monuments.
2. It is recommended that in the forests defined as HCV 6 are not conducted any operational /management activities with the exception of removal of dangerous to human safety trees.
3. If a decision is made anyway to implement management activities, those are coordinated / agreed with local community representatives and experts

(cultural anthropologists, historians, an expert in tourism, etc.) in order to identify and retain key aesthetic characteristics of the forest. Activities leading to a change of the landscape value and/or decrease of the value of the forest as HCV are not implemented. Certain fellings that would reduce the aesthetic appearance of the forest near important for the culture, traditions and tourism sites are not implemented (incl. clear fellings, short-gradual fellings, fellings with great intensity). Particular attention should be paid to maintaining and possibly improving the aesthetic and protective functions of the forest by keeping the dead standing and lying trees, living single trees and groups of trees with interesting interior features, hollow trees, old trees, etc.)

4. Forest management activities are not implemented in the HCV 6 sites during the high tourist seasons and periods of holding the traditional fairs or cultural, historical and religious events of the local population.

RECOMMENDATIONS AND GUIDANCE FOR THE MONITORING OF HCV 6

1. To investigate whether the HCVF retain critical importance as defined for HCV 6 in five years (in consultation with representatives of local communities and experts (cultural anthropologists, historians, an expert in tourism, etc.).
2. To exercise annual control over the compliance of the regimes of the cultural heritage monuments that are specified in their orders.
3. To exercise annual control over the activities stipulated in forest plans and whether they comply with the recommendations and guidelines for management of designated HCV 6.
4. It is recommended that in the monitoring is included documentary check and pictures.

ANNEXES of HCVF Toolkit

Annex 1A of HCVF Toolkit: Plant species indicators for HCV

LIST OF ENDANGERED, THREATENED WITH EXTINCTION AND ENDEMIC PLANT SPECIES IN BULGARIA, INDICATORS FOR HIGH CONSERVATION VALUES IN FORESTS

A. Endemic, rare and endangered plant species

1. **Ground Cedar** (*Diphasiastrum complanatum* (L.) Holub) – regionally extinct, listed in BDA, occurring in various habitats having a wide range of environmental conditions, established in the Western Rhodopes.
2. **Calabrian Pine** (*Pinus brutia* Ten.) – critically endangered, listed in BDA, occurring in xerothermic habitats in the Eastern Rhodopes.
3. **Common Yew** *(Taxus baccata* L.) – endangered, listed in BDA, occurring in shady, damp places along streams, in the composition of deciduous and mixed coniferous-deciduous forests.
4. **Thracian oak** *(Quercus thracica* Stef. & Nedjalkov) – extinct, listed in BDA, endemic to Bulgaria, occurring in the Eastern Rhodopes.
5. *Quercus mestensis* (Bondev & Gancev) – critically endangered, listed in BDA, endemic to Bulgaria, occurring west of Belitsa.
6. **Kermes Oak** *(Quercus coccifera* L.) – endangered, listed in BDA.

7. **Horse Chestnut (***Aesculus hippocastanum* L.) – endangered, listed in BDA, endemic to the Balkans, tertiary relict, occurring in the Eastern Balkan Mountains.
8. **Sweet Chestnut** *(Castanea sativa* Mill.) – endangered, listed in BDA, established in the Western Balkan Mountains, Belasitsa, Slavyanka, the valley of Mesta River, Pirin, Western Rhodopes.
9. **Iguana Hackberry** *(Celtis glabrata* Stev.) – endangered, tertiary relict, established in North- Eastern Bulgaria, the Danubian Plain, Eastern Balkan Mountains, Eastern Rhodopes, Thracian Lowland, Tundzha Hilly Plain, Strandzha.
10. **Alpine Buckthorn** *(Rhamnus alpina* L.) – endangered, listed in BDA.

11. **Heldreich's Maple** *(Acer heldreichii* Orph.) – vulnerable, listed in BDA, endemic to the Balkans.
12. **Bay Willow** (*Salix pentandra* L.) – critically endangered, listed in BDA, relict, established in Vitosha and in Znepole Region.
13. **Rosemary Leaved Willow** *(Salix rosmarinifolia* L.) – critically endangered, listed in BDA, established in Sofia Region.
14. *Salix xanthicola* K.I. Chr. – vulnerable, listed in BDA, endemic to the Balkans, occurring along streams in Southern Bulgaria.

15. **Caucasian Whortleberry** ***(****Vaccinium arctostaphylos* L.) – endangered, listed in the Bern Convention, listed in BDA, tertiary relict, occurring in shady forests of oriental beech and oriental durmast.
16. *Chamaecytisus frivaldszkyanus* **(**(Degen) Kuzmanov**)** – endangered, endemic to Bulgaria, occurring in sparse oak and hornbeam forests in the regions of Pleven, Plovdiv, Lovech, Turnovo, Haskovo, Stara Zagora.
17. *Chamaecytisus kovacevii (*(Velen.) Rothm.**)** – endangered, endemic to Bulgaria, listed in BDA, occurring in sparse oak and hornbeam forests in the regions of Pleven, Ruse, Montana, Sofia, Stara Zagora.
18. **Black Currant** (*Ribes nigrum* L.) – critically endangered, listed in BDA, established in the Western Rhodopes.
19. **Webii Wild Almond** (*Amygdalus ×delipavlovii* S. Seraf) – critically endangered, listed in BDA, occurring in rocky and dry places, forming shrub communities with *Jasminum fruticans, Paliurus spina-christi, Pyrus amygdaliformis,* etc.
20. **Common Holly (***Ilex aquifolia L***.)** – endangered, listed in BDA, tertiary relict, occurring in moist and shady beech and mixed forests as undergrowth.
21. **Colhic Holly** ***(****Ilex colchica* Pojark.) – endangered, tertiary relict, listed in BDA, occurring in the evergreen undergrowth of moist and shady forests of oriental beech.
22. **Greek Strawberry Tree** (*Arbutus andrachne* L.) – critically endangered, listed in BDA, occurring in Mediterranean low-stem shrubs and groves, mostly on rocky hillsides; established in the Rhodopes (Eastern – the villages of Dolno Lukovo, Gorno Lukovo, Mandritsa, Kostilkovo, Cherna Cherkva).
23. **Strawberry Tree** (*Arbutus unedo* L.) – critically endangered, listed in BDA, occurring in Mediterranean low-stem evergreen or deciduous shrubs and groves on rocky limestone or sandstone slopes; established in the Eastern Rhodopes and Strandzha.
24. **Small-leaved Hawthorn** (*Crataegus microphylla* C. Koch) – critically endangered, listed in BDA, occurring in dense forests within wetlands with high humidity.
25. *Asperula involucrata* (Wahlenb). – critically endangered, listed in BDA, occurring in light beech forests; established in Strandzha.
26. **Spurred Helleborine** (*Cephalanthera epipactoides* Fisch. & C.A. Mey.) – critically endangered, listed in BDA, established in the Eastern Rhodopes.
27. *Colchicum diampolis(* Delip. & Cheshm.) – critically endangered, endemic to Bulgaria, listed in BDA, occurring in glades within dense forests in the region of Yambol, Znepole, the Tundzha Hilly Plain.

28. **Lady's Slipper Orchid** (*Cypripedium calceolus* L.) – critically endangered, listed in BDA, relict, occurring in coniferous, mixed and deciduous forests, thickets and glades; established in the Rhodopes.
29. *Eranthis bulgaricus* (Stef.) – critically endangered, endemic to the Balkans, listed in BDA, occurring in deciduous forests and thickets, as well as in grasslands along the outskirts of forests.
30. **Lebanese wild apple** (*Eriolobus trilobata* (Poir.) M. Roem.) – critically endangered, listed in BDA, included in the World List of Endangered Trees as rare species. Occurring in xerothermic sparse deciduous forests and their outskirts; established in the Rhodopes.
31. **St. John's Chamomile** (*Anthemis sancti-joannis* Stoj.,Stef. & Turrill) – endangered, listed in BDA, endemic to Bulgaria, occurring in sparse beech, spruce and mixed forests in Rila, Slavyanka, and Mid Balkan Mountains.
32. *Fritillaria drenovskyi* (Degen & Stoj.) – critically endangered, listed in BDA, endemic to the Balkans, Bern Convention, glades in beech and pine forests; established in Slavyanka and Southern Pirin.
33. *Fritillaria stribrnyi* (Velen.) – critically endangered, listed in BDA, endemic to the Balkans, occurring in grassy places within sunlit low-stem deciduous forests (dominated by pubescent oak) in the regions of Plovdiv and Yambol.
34. **Round-leaved Birthwort (***Aristolochia rotunda* L**) –** endangered, listed in BDA, occurring individually in xerothermic light oak forests mainly in the Eastern Rhodopes to a limited extend in the Thracian Lowland and Struma Valley.
35. *Betonica scardica* (Griseb.**)** – endangered, listed in BDA, endemic to the Balkans, occurring in sparse oak forests in the region of Kyustendil.
36. **Green Hound`s Tongue** (*Cynoglossum germanicum* Jacq.) – endangered, listed in BDA, occurring in woody and shady places within the Mid Balkan Mountains on limestone in mixed beech and hornbeam forest.
37. **Grecian Foxglove** (*Digitalis laevigata* Waldst. & Kit.) – endangered, endemic to the Balkans, occurring in grassy and rocky places, among thickets and thinned forests of *Carpinus orientalis, Corylus avellana, Fagussylvatica, Abies alba*, and *Castanea sativa* forests.
38. **Daphne-laurel** (*Daphne laureola* L.) – endangered, listed in BDA, occurring in shady beech and fir forests.
39. **Pontic daphne** *(Daphne pontica* L.) **–** endangered, listed in BDA, preglacial relict; established in Strandzha.
40. **Violet Helleborine (***Epipactis purpurata* Sm.) – endangered, listed in BDA, occurring in well preserved shady beech forests.

41. **Giant Snowdrop (***Galanthus elwesii* Hook.) – endangered, listed in BDA, occurring among thickets, forests, rocky meadows on calcareous soils, in river valleys within the lowland and foothill belt on rich alluvial soils.
42. **Common Snowdrop (***Galanthus nivalis* L.) **–** endangered, listed in BDA, occurring among thickets, forests, rocky meadows, in river valleys within the lowland and foothill belt on alluvial soils.
43. **Broad-leaved Bellflower** *(Campanula latifolia* L.) – endangered, listed in BDA, occurring in the Western Balkan Mountains.
44. *Galium rhodopeum* **(**Velen.) – endangered, listed in BDA, included in the Bern Convention, endemic to the Balkans, tertiary relict. Participating in the grass layer of *Quercus pubescens* and *Carpinus orientalis* communities.
45. **Bohemian Crane's-bill (***Geranium bohemicum* L.) - endangered, listed in BDA, occurring in the lower parts of the mountains in mixed deciduous forests with dominated by *Quercus petraea, Carpinus betulus, Fagus sylvatica.*
46. **Bulbous Crane's-Bill (***Geranium tuberosum* L.) - endangered, listed in BDA, occurring in oak forests.
47. **Creeping ladies tresses** (*Goodyera repens* (L.) R. Br.) – endangered, listed in BDA, relict, occurring in pine and fir forests, mixed conifer and sometimes coniferous-deciduous forests in the Balkan and Rhodope Mountains.
48. **Tutsan, Sweet Amber** (*Hypericum androsaemum* L.) – endangered, listed in BDA, occurring in moist, shady gullies in the forests of Strandzha.
49. **Creeping St. John's Wort** *(Hypericum calycinum* L.) – endangered, listed in BDA, occurring in shady gullies, thinned forests and riverbanks in Strandzha.
50. **Two-Flowered Everlasting-Pea (***Lathyrus grandiflorus* Sibth. & Sm.**)** – endangered, listed in BDA, occurring in deciduous forest communities in the region of Znepole, Osogovska Mountain, Belasitsa, Slavyanka, Rila.
51. *Lathyrus transsilvanicus* ((Spreng.) Fritsch) – regionally extinct, listed in BDA, occurring in shady oak forests on brown forest soil.
52. **Creeping-Rooted Medick** (*Medicago carstiensis* Wulfen) - endangered, listed in BDA, occurring in beech and mixed beech and chestnut forests.
53. **Wild Peony, Male Peony** *(Paeonia mascula* (L.) Mill.) - endangered, listed in BDA, relict, occurring in sunlit places within oak and oriental-hornbeam forests.
54. **Turkish Squill** *(Scilla bithynica* Boiss.) - endangered, listed in BDA, occurring in moist dense forests.
55. **Serbian Woundwort (***Stachys serbica* Pančić**)** – endangered, endemic to the Balkans, listed in BDA, occurring in sparse oak forests in the region of Kyustendil, Kardzhali and Yambol.

56. *Stachys balcanica (*P.W.Ball**)** – endangered, listed in BDA, endemic to the Balkans, occurring in gullies and dry oak forests in the Eastern and Central Rhodopes.
57. **Claspleaf Twistedstalk (***Streptopus amplexifolius* (L.) DC.**)** – endangered, listed in BDA, occurring in moist shady spots within spruce forests and shaded rocky places.
58. **Pontic Fritillary (***Fritillaria pontica* Wahlenb.) – endemic to the Balkans, occurring in various types of forests in Eastern and Southern Bulgaria.
59. **Common columbine, Granny's nightcap (***Aquilegia vulgaris* L.) – in forests and thickets.

60. **Intermediate Wintergreen (***Pyrola media* Swartz**)** – in damp shady places in forests.

61. **Eastern Sowbread (***Cyclamen coum* Miller**)** – listed in the Bern Convention, occurring in oak forests and thickets.
62. **Rhodope Toothwort (***Lathraea rhodopaea* Dingler) – endemic to the Balkans, included in the IUCN List (R), occurring in moist forests in the Rhodopes, the region of Plovdiv, Slavyanka, Belasitsa and Rila.
63. *Pyrus bulgarica (*Khutath. & Sachok.) – endemic to Bulgaria, occurring within thickets along oak forests in the Eastern Balkan Mountains, the Black Sea Coast, Lyulin, the Tundzha Hilly Plain and Strandzha.
64. **Oriental Plane (***Platanus orientalis* L.) – along rivers.

65. **Abraham-Isaac-Jacob (***Trachystemon orientalis* (L.) G. Don f.) – within forests in the Eastern Balkan Mountains, Strandzha and the Black Sea Coast.
66. *Centaurea wagenitziana (*Bancheva & Kit Tan*/C. amplifolia* auct. bulg.**)** – endemic to the Balkans, critically endangered, listed in BDA, included in the IUCN List, occurring in oak (Quercus frainetto – Quercus cerris) forests in the region of Burgas (Mandra Village).
67. **Pea Vetch, Pale-flower Vetch** (*Vicia pisiformis* L.) **–** within deciduous shrubs and forests.

68. **Great Wood Vetch** *(Vicia dumetorum* L.) – within deciduous shrubs and forests.

69. **Round-Leaved Alexander** (*Smyrnium rotundifolium* Miller) – within forests and thickets in the Struma Valley, the Eastern Rhodopes and the Tundzha Hilly Plain.

For each of these species there is available information about their distribution in Bulgaria. Toolkit users should check whether any of these species possibly occur in the region covering the forest they manage and how it looks like.

Annex 1B of HCVF Toolkit: Animal species indicators for HCV

LIST OF ENDANGERED, THREATENED WITH EXTINCTION AND ENDEMIC ANIMAL SPECIES IN BULGARIA, INDICATORS FOR HIGH CONSERVATION VALUES IN FORESTS AND MEASURES FOR CONSERVATION OF THEIR HABITATS

No.	Latin / Bulgarian	Conservation Status	Threshold	Conservation Measures
1	*Ursus arctos* Brown bear	In Bulgaria: RDB – endangered EN, BDA-II, III; International: IUCN-LC; BeC-II; CITES-II;	Existing den, inhabited at least twice in the last 10 years, or area located within a corridor providing for the natural connectivity of the population.	No operations undertaken within a radius of 300 m around the den. In case of a corridor, concerted operations could be carried out depending to the width of the corridor. Intensive logging or installation of game retention fences are not allowed in a corridor narrower than 1000 m.
2	Lutra lutra Otter	In Bulgaria: RDB-vulnerable VU; BDA-II, III; International: IUCN-NT; BeC-II; CITES- I; HD-	Existing lair	No operations allowed within a radius of 100 m around a lair (including corrections of rivers, construction of dikes, clearing of coastal vegetation, extraction of aggregates, construction works). At places, where necessary, riparian vegetation shall be restored.

3	Lynx lynx Lynx	In Bulgaria: RDB-critically endangered CR; BDA-II, III; International:	Presence of the species and existing habitable lair	No operations to be undertaken within a radius of 400 m around a lair. Restricted felling in areas where presence of the species is established, as well as around and within rocky habitats suitable for building of lairs. Effective control on poaching and on the intensive use of deer populations.
4.	Martes martes Pine marten	In Bulgaria: RDB-endangered EN; BDA-II, III; International: IUCN-LC; HD II,V	Presence of the species	Restricted use of old forests and confined pools. Ban on the logging of old hollow trees (which are potential lairs) in areas where the presence of species is established.
5.	All the bat species	In Bulgaria: BDA-II, III; International: BeC-II; Bonn Convention and EUROBATS	Presence of the species	Ban on the logging of old hollow trees and of trees with peeled bark (potential shelters and wintering sites) in areas where the presence of bat species is established.Prohibition for storage of timber and felling debris at cave inlets. If the inlet to a cave or a crevice (potential or existing shelter for bats) is too overgrown and hinders the passage of bats, cleaning of the inlet is recommended.

6.	Western four-lined snake Elaphe quatuorlinea ta	In Bulgaria: RDB-endangered EN; BDA-II; III; International IUCN-NT; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall not be collected, transferred or killed. The land that has suffered forest fires shall not be ploughed up. Subunits with undergrowth shall be left along the forest edge, if possible. Ecotone zones (zones between forest and open areas) shall not be cleared from shrubs.
7.	Blotched snake Elaphe sauromates	In Bulgaria: RDB-endangered EN; BDA-II; III; International BeC-II; HD-II, IV	Presence of the species	Animals of this species shall not be collected, transferred or killed. The land that has suffered forest fires shall not be ploughed up. Subunits with undergrowth shall be left along the forest edge, if possible. Ecotone zones (zones between forest and open areas) shall not be cleared from shrubs.
8.	Leopard Snake *Zamenis situla*	In Bulgaria: RDB-endangered EN; BDA-II; III; International IUCN-LC; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall not be collected, transferred or killed. The land that has suffered forest fires shall not be ploughed up. Subunits with undergrowth shall be left along the forest edge, if possible. Ecotone zones (zones between forest and open areas) shall not be cleared from shrubs.

9.	European pond turtle Emys orbicularis	In Bulgaria: BDA-II; III; International IUCN-NT; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall not be collected, transferred or killed. No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up. Fallen decaying trees within a radius of at least 50 m around the water bodies where the presence of species is registered shall not be removed.
10	Balkan pond turtle Mauremys rivulata	In Bulgaria: RDB-vulnerable VU; BDA-II; III; International BeC-II; HD-II, IV	Presence of the species	Animals of this species shall not be collected, transferred or killed. No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up.Fallen decaying trees within a radius of at least 50 m around the water bodies where the presence of species is registered shall not be removed.

11.	Hermann's tortoise Testudo hermanni	In Bulgaria: RDB-endangered EN; BDA-II; III; International IUCN- NT; BeC-II;CITES- II HD-II, IV	Presence of the species	Animals of this species shall not be collected, transferred or killed. The land that has suffered forest fires shall not be ploughed up. Subunits with undergrowth shall be left along the forest edge, if possible. Ecotone zones (zones between forest and open areas) shall not be cleared from shrubs.
12.	Spur-thighed tortoise Testudo graeca	In Bulgaria: RDB-endangered EN; BDA-II; III; International IUCN- VU; BeC-II;CITES- II HD-II, IV	Presence of the species	Animals of this species shall not be collected, transferred or killed. The land that has suffered forest fires shall not be ploughed up. Subunits with undergrowth shall be left along the forest edge, if possible. Ecotone zones (zones between forest and open areas) shall not be cleared from shrubs.
13	Triturus cristatus Northern crested newt	In Bulgaria: RDB-vulnerable VU; BDA-III; International IUCN-LC; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall be kept safe from injury or killing. No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up.

14	Triturus Dobrogicus Danube crested newt	In Bulgaria: RDB-vulnerable VU; BDA-III; International IUCN-LC; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall be kept safe from injury or killing. No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up

15	Balkan-Anatolian crested newt *Triturus ivanbureschi*	In Bulgaria: BDA-II; III; International IUCN-LC; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall be kept safe from injury or killing. No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up.
16	Macedonian crested newt *Triturus macedonicus*	In Bulgaria: BDA- III; International IUCN-LC; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall be kept safe from injury or killing. No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up.
17	European fire-bellied toad *Bombina bombina*	In Bulgaria: BDA-II; III; International: IUCN-LC; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall be kept safe from injury or killing.No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up.

18	Yellow-bellied toad *Bombina variegata*	In Bulgaria: BDA-II; III; International IUCN-LC; BeC-II; HD-II, IV	Presence of the species	Animals of this species shall be kept safe from injury or killing. No felling shall be undertaken in forests within a radius of at least 50 m around water bodies where the presence of species is registered. Water bodies used by the species shall not be drained up.
19	*Phalacrocorax pygmeus* Pygmy cormorant	In Bulgaria: RDB-endangered EN; BDA-II, III; International: IUCN-NT;BeC-II; BoC-II	Presence of the species Nesting site	No felling shall be undertaken in forests within a radius of at least 200 m around water bodies where the presence of species is registered. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.04 – 01.08.
20	*Plegadis falcinellus* Glossy ibis	In Bulgaria: RDB- critically endangered CR, BDA-II, III; International: BeC-II; BoC-II	Presence of the species Nesting site	No felling shall be undertaken in forests within a radius of at least 200 m around water bodies where the presence of species is registered. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.04 – 01.09.
21	All the rest species of herons and great cormorant, colonies of more than 5 nests		Presence of the species Nesting site	No felling shall be undertaken in forests within a radius of at least 200 m around water bodies where the presence of species is registered.No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.04 – 01.09.No shooting of specimens of these species shall be allowed.

22	*Platalea leucorodia* Spoonbill	In Bulgaria: RDB- critically endangered CR; BDA-II, III (I); International: IUCN-LC; BeC-II, BoC-II; CITES-II,	Presence of the species Nesting site	No felling shall be undertaken in forests within a radius of at least 200 m around water bodies where the presence of species is registered. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.04 – 01.09. No shooting of specimens shall be allowed

23	*Ciconia nigra* Black stork	In Bulgaria: vulnerable VU; BDA-II, III; International: IUCN-LC; BeC-II; CITES-II; BoC-II	Presence of the species Nesting site	Large old trees to be retained in the units where presence of the species is registered, for such trees are potential nesting sites.No operations shall be carried out within a radius of 500 m around nests of the species in the nesting season 15.03 – 01.09. Durnig the rest of the year the felling exclusion zone shall be with a radius of 200 m. No intensive fellings shall be undertaken in subunits where nests of the species are registered.
24	*Aquila clanga* Greater spotted eagle	In Bulgaria: RDB- critically endangered CR; BDA-II; III (I); International: IUCN-VU; BeC-II; CITES- II; БоК-II	Nesting site	Large old trees to be retained in the units where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 500 m around nests of the species in the nesting season 01.03 – 01.08. Durnig the rest of the year the felling exclusion zone shall be with a radius of 200 m. No intensive fellings shall be undertaken in subunits where nests of the species are registered.

25	*Aquila heliaca* Eastern imperial eagle	In Bulgaria: critically endangered CR; BDA–II, III; International: IUCN-VU; BeC-II; CITES-I; BoC-II.	Occupied territory or nesting site	Large old trees shall be retained along the forest edge in the units where presence of the species is registered, for such trees are potential nesting sites. A considerable part of the nests of imperial eagles in the lower areas are on poplars, since these are usually the only tall trees surviving in the surroundings. No operations shall be carried out within a radius of 500 m around nests of the species in the nesting season 01.03 – 01.09. Durnig the rest of the year the felling exclusion zone shall be with a radius of 200 m.
26	*Aegypius monachus* Cinereous vulture	In Bulgaria: RDB-extinct EX (as nesting sp.); BDA-II, III; International: IUCN-NT; BeC-II; CITES- II, BoC-II	Nesting site	Large old trees to be retained in the units where presence of the species is registered, for such trees are potential nesting sites.No operations shall be carried out within a radius of 500 m around nests of the species in the nesting season 15.02 – 01.08. Durnig the rest of the year the felling exclusion zone shall be with a radius of 200 m. No intensive fellings shall be undertaken in subunits where nests of the species are registered.

27	*Scolopax rusticola* Woodcock	In Bulgaria: RDB-endangered EN, BDA-IV; International: IUCN-LC; BeC-II	Occupied territory or nesting site	Since this species nests on the ground, it is very vulnerable during brooding. In the nesting season (01.04 – 01.08) no operations shall be undertaken in sections where presence of the species is registered. It is recommended to set up such sections as old growth forests.
28	*Bonasia bonasia* Hazel grouse	In Bulgaria BDA –II, III	Nesting site	Since this species often nests on the ground, it is very vulnerable during brooding. In the nesting season (01.04 – 01.08) no operations shall be undertaken in sections where presence of the species is registered.

29	*Pandion haliaetus* Osprey	In Bulgaria: RDB- critically endangered CR; BDA-III; International: IUCN-VU, BeC-II; BoC-I, II; CITES-I	Occupied territory or nesting site	Large old trees shall be retained near water bodies where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 500 m around nests of the species in the nesting season 01.03 – 01.08. Durnig the rest of the year the felling exclusion zone shall be with a radius of 200 m.

30	*Milvus migrans* Black kite	In Bulgaria: RDB-critically endangered CR; BDA-II-III; International:, IUCN-LC; BeC-II, BoC-II	Occupied territory or nesting site	Large old trees shall be retained (especially near water bodies) where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 200 m around nests of the species in the nesting season 01.03 – 01.08. Durnig the rest of the year the felling exclusion zone shall be with a radius of 150 m.
31	*Haliaeetus albicilla* White tailed eagle	In Bulgaria: RDB-vulnerable VU; BDA-II, III; International: IUCN-LC; BeC-II; CITES-I; BoC-II	Occupied territory or nesting site	Large old trees shall be retained near water bodies where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 500 m around nests of the species in the nesting season 01.03 – 01.08. Durnig the rest of the year the felling exclusion zone shall be with a radius of 300 m.
32	*Accipiter brevipes* Levant	In Bulgaria: RDB-vulnerable VU; BDA–II; International: IUCN-LC;;	Occupied territory or nesting site	Trees with nests and large old trees shall be retained in the units where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.03 – 01.08. Durnig the rest of the year the felling exclusion zone shall be with a radius of 150 m. No intensive fellings shall be undertaken in subunits where nests of the species are
33	*Accipiter gentilis* Northern	In Bulgaria: RDB-endangered, BDA-III; International:	Occupied territory or nesting site	

34	*Accipiter nisus* Eurasian sparrowhawk	In Bulgaria: RDB-endangered International: BeC-II, CITES-	Occupied territory or nesting site	registered.
35	*Hieraaetus pennatus* Booted eagle	In Bulgaria: RDB-vulnerable VU; BDA-III; International: IUCN- LC; BeC-III; CITES-II; BoC-II	Occupied territory or nesting site	Trees with nests and large old trees shall be retained in the units where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.03 – 01.08. No intensive fellings shall be undertaken in subunits where nests of the species are registered.
36	*Aquila pomarina* Lesser spotted eagle	In Bulgaria: RDB-vulnerable VU; BDA-III; International: IUCN- LC; BeC-II; BoC-I, II, CITES-II	Occupied territory or nesting site	Trees with nests and large old trees shall be retained along the forest edge and in the units where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.03 – 01.08. Durnig the rest of the year the felling exclusion zone shall be with a radius of 150 m. No intensive fellings shall be undertaken in subunits where nests of the species are registered.

37	*Aquila chrysaetos* Golden eagle	In Bulgaria: RDB-vulnerable VU; BDA-II, III; International: IUCN- LC; BeC-II; CITES-II; BoC-II.	Occupied territory or nesting site	Trees with nests and large old trees shall be retained in the units where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 500 m around nests of the species (including nests on rocks) in the nesting season 01.03 – 01.09. Durnig the rest of the year the felling exclusion zone shall be with a radius of 300 m. No intensive fellings shall be undertaken in subunits where nests of the species are registered.
38	*Circaetus gallicus* Short-toed eagle	In Bulgaria: RDB-vulnerable VU; BDA-II; International: IUCN- LC; BeC-II, CITES-II; BoC-II.	Occupied territory or nesting site	Highly branched trees, trees with nests and large old trees shall be retained along the forest edge and in the units where presence of the species is registered, for such trees are potential nesting sites. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.03 – 01.09. No intensive fellings shall be undertaken in subunits where nests of the species are registered.
39	*Falco cherrug* Saker falcon	In Bulgaria: RDB- critically endangered CR; BDA-III; International: IUCN – EN; BeC-III; CITES-II; BoC-II	Occupied territory or nesting site	Old and highly branched trees, as well as trees with nests (including nests of other species, since the saker falcon often uses old nests of other birds) shall be retained along the forest edge and in the units where presence of the species is registered.

40	*Falco subbuteo* Eurasian hobby	In Bulgaria: RDB - vulnerable, BDA-II, III; International: BeC-II, CITES-II, BoC-II.	Nesting site	Trees with nests (including nests of other species, e.g. crows) shall be retained along the forest edge and in the units where presence of the species is registered. No operations shall be carried out within a radius of 300 m around nests of the species in the nesting season 01.04 – 01.08.
41	*Pernis apivorus* European honey buzzard	In Bulgaria RDB	Occupied territory or nesting site	Old and highly branched trees, as well as trees with nests (including nests of other species, since the European honey buzzard often uses old nests of other birds, such as crows) shall be retained in the units where presence of the species is registered.
42	*Buteo rufinus* Long-legged buzzard	In Bulgaria: vulnerable, BDA-II, III; International: IUCN-VU; ECS–spec 3, endangered; BD-I; CITES-II; BeC-II; BoC-II.	Occupied territory or nesting site	Old and highly branched trees, as well as trees with nests shall be retained in the units where presence of the species is registered. No operations shall be carried out within a radius of 300 m around nests of the species (including nests on rocks) in the nesting season 01.03 – 01.08.
43	*Falco vespertinus* Red-footed falcon	In Bulgaria: RDB- critically endangered CR; BDA-III; International: IUCN - NT;	Occupied territory or nesting site	Trees with nests (including nests of other species, e.g. crows) shall be retained along the forest edge and in the units where presence of the species is registered.

44	*Columba oenas* Stock dove	In Bulgaria: RDB-endangered EN; BDA-III.	Occupied territory or nesting site	In the nesting season (15.03 – 15.08) No operations shall be carried out in the units where presence of the species is registered. Old hollow trees, even in younger plantations, shall be retained.
45	*Aegolius Funereus* Boreal owl	In Bulgaria: RDB-vulnerable VU; BDA-II, III, International: IUCN- LC; CITES-II, BD, BeC-II	Occupied territory or nesting site	No operations shall be carried out in the nesting seasons of Ural owl and Eurasian eagle-owl (01.03. – 01.07.), Boreal owl and Eurasian pygmy owl (01.04. – 01.07.) in the subunits where presence of the species is registered. No sanitary fellings shall be undertaken in these subunits, except in case of major natural disturbances or proven calamity. When forestry operations are carried out in these and in neighboring subunits, trees with hollows shall be retained as being potential nesting sites. It is recommended to designate the habitats of this species as old growth forests.
46	*Glaucidium passerinum* Eurasian pygmy owl	In Bulgaria: RDB-endangered EN; BDA-II, III; International:	Occupied territory or nesting site	
47	*Strix uralensis* Ural owl	In Bulgaria: RDB-endangered EN; BDA-II, III; International: IUCN- LC;	Occupied territory or nesting site	

48	*Bubo Bubo* Eurasian eagle-owl	In Bulgaria: RDB - endangered, BDA-II, III; International: ECS-spec 3,	Occupied territory or nesting site	
49	*Dendrocopos leucotos* White-backed woodpecker	In Bulgaria: RDB-endangered EN; BDA–II, III; International:	Occupied territory or nesting site	During the nesting season (01.02. – 01.07) no operations shall be carried out in the subunits where presence of the species is registered. No sanitary fellings shall be undertaken nor dry and fallen debris taken off these subunits, except in case of major natural disturbances or proven calamity. When forestry operations are carried out in these and in neighboring subunits, all standing and fallen dead trees, trees with hollows, as well as trees with visible signs of disease and
50	*Picoides tridactylus* Eurasian three-toed woodpecker	In Bulgaria: RDB-endangered EN; BDA-II, III; International:	Occupied territory or nesting site	
51	*Dendrocopos medius* Middle spotted woodpecker	In Bulgaria: BDA-II International: IUCN- LC	Occupied territory or nesting site	
52	*Picus canus* Grey-faced woodpecker	In Bulgaria: RDB-endangered BDA-II, III; International: BD-I; BeC-II.	Occupied territory or nesting site	

53	*Dryocopus martius* Black woodpecker	In Bulgaria: RDB - vulnerable; BDA-II, III; International:	Occupied territory or nesting site	
54	*Ficedula parva* Red-breasted flycatcher	In Bulgaria: RDB- vulnerable VU; BDA-II, III; International: IUCN- LC;	Occupied territory or nesting site	During the nesting season (01.05. – 15.08) no operations shall be carried out in the subunits where presence of the species is registered. The species is migratory and nests in hollows. Trees with hollows shall be retained, even in younger plantations. Such trees near rivers are of essential significance. It is recommended to designate the habitats of this species as old growth forests.
55	*Ficedula semitorquata* Semi-collared flycatcher	In Bulgaria: RDB	Occupied territory or nesting site	
56	*Muscicapa striata* Spotted flycatcher	In Bulgaria: BDA-III	Occupied territory or nesting site	
57	*Phoenicurus phoenicurus* Common redstart	In Bulgaria: RDB	Occupied territory or nesting site	During the nesting season (15.05. – 15.08) no operations shall be carried out in the subunits where presence of the species is registered. The species is migratory and nests in hollows. Trees with hollows shall be retained, even in younger plantations.

58	*Carabus intricatus* (Linnaeus) Blue ground beetle	International: IUCN - NT; CORINE	***Final Assessment*** presence of the species	Ban on clearing of riparian forests, uprooting of stumps and modifying of the hydrological balance of rivers. Ban on conversion of deciduous plantations to conifer.
59	*Lucanus cervus* (Linnaeus) Stag beetle	In Bulgaria: BDA - II, III International: HD - II; IUCN European Red List of Saproxylic Beetles - NT; BC - III	**Initial Assessment** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
60	*Propomacrus bimucronatus* (Pallas) European long-armed beetle	In Bulgaria: RDB - endangered (EN) International: IUCN European Red List of Saproxylic Beetles -NT	***Final Assessment*** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
61	*Gnorimus nobilis nobilis* (Linnaeus)	International: IUCN European Red List of Saproxylic	***Final Assessment*** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps.

62	*Gnorimus variabilis* (Linnaeus) Variable chafer	International: IUCN European Red List of Saproxylic Beetles - VU	***Final Assessment*** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
63	*Osmoderma eremita* (Scopoli) Hermit beetle	In Bulgaria: RDB –end. (EN); BDA - II, III International: HD - II, IV; IUCN - VU; IUCN European Red List of Saproxylic Beetles - NT; BC - II;	***Final Assessment*** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees (mostly trees with hollows); marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific)

64	*Cucujus cinnaberinus* (Scopoli) Red flat bark beetle	HD - II, IV; IUCN - VU; IUCN European Red List of Saproxylic Beetles - NT; BC - II; CORINE	***Final Assessment*** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps and logging of standing dead trees. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
65	*Triplax* spp. Fungus beetles	International: IUCN European Red List of Saproxylic Beetles	***Final Assessment*** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees (mostly covered by tree fungi), marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).

66	*Ergates faber* (Linnaeus) Long-horned beetle	International: IUCN European Red List of Saproxylic Beetles - LC	***Final Assessment*** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
67	*Prionus besicanus* Fairmaire Tile-horn beetle	International: IUCN European Red List of Saproxylic Beetles - DD	**Initial Assessment** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
68	*Prionus coriarius* (Linnaeus) Tanner beetle	International: IUCN European Red List of Saproxylic Beetles - LC	**Initial Assessment** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).

69	*Cerambyx cerdo* Linnaeus Great capricorn beetle	<u>In Bulgaria:</u> BDA - II, III International: HD - II, IV; IUCN - VU; IUCN European Red List of Saproxylic Beetles - NT; BC - II;CORINE	**Initial Assessment** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).

70	Rosalia Longicorn Rosalia alpina (Linnaeus)	<u>In Bulgaria: BDA - II, III</u> <u>International</u>: HD - II, IV; IUCN - VU; IUCN European	**Initial Assessment** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire
71	*Morimus asper funereus* (Mulsant) European lon ghorn beetle	<u>In Bulgaria:</u> BDA - II <u>International</u>: HD - II; IUCN Red List of Threatened Species - VU; CORINE	**Initial Assessment** presence of the species	Identification and retention of old growth forests and islands of old age and their conservation and exclusion from forestry operations. Ban on felling of biotope trees; marking and conservation of future ones. Ban on uprooting of stumps. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).

72	*Eriogaster catax* (Linnaeus, 1758) Eastern eggar	In Bulgaria: BDA – II International: HD – II, IV; BeC II; IUCN Red List of Threatened Species - DD	**Initial Assessment** presence of the species	Conservation of shrub vegetation and undergrowth. Ban on replacement of deciduous plantations with conifer and non-typical species. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
73	*Perisomena caecigena* (Kupido, 1825) Autumn emperor	In Bulgaria: BDA – II International: CORINE newly proposed	**Initial Assessment** presence of the species	Ban on replacement of deciduous plantations with conifer and non-typical species. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
74	*Dolbina elegans* (A. Bang-Haas, 1912)	International: CORINE newly proposed	**Initial Assessment** presence of the species	Ban on replacement of deciduous plantations with conifer and non-typical species. Development of fire prevention and fire control plans. Prohibition for drainages
75	*Apatura metis* Freyer, 1829 Freyer's purple emperor	In Bulgaria: BDA – II; Main Regions for Butterflies in Bulgaria International: CORINE; HD – IV; BeC II; Red Data Book of European Butterflies	**Initial Assessment** presence of the species	Conservation of riparian forests and willow- groves. Ban on replacement of deciduous plantations with conifer and non-typical species. Development of fire prevention and fire control plans. Prohibition for drainages and modification of water balance. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).

76	Euphydryas maturna (Linnaeus, 1758) Scarce fritillary	Butterflies in Bulgaria: BDA – II; Main Regions for Bulgaria; RDB „vulnerable“. International: HD – II, IV; BeC II; Red Data Book of European Butterflies VU/LC; IUCN - DD	**Initial Assessment** presence of the	Conservation of shrub vegetation and undergrowth. Ban on replacement of deciduous plantations with conifer and plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
77	*Desertobia ankeraria* (Staudinger, 1861)	International: HD – II, IV.	**Initial Assessment** presence of the species	Ban on replacement of deciduous plantations with conifer and non-typical species. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
78	*Dioszeghyana schmidtii* (Diószeghy, 1935) Carpathian quaker	In Bulgaria: BDA – II International: HD – II, IV	**Initial Assessment** presence of the species	Conservation of shrub vegetation and undergrowth. Ban on replacement of deciduous plantations with conifer and non-typical species. Development of fire prevention and fire control plans. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).

79	*Euplagia quadripunctaria* (Poda, 1761) Jersey tiger	In Bulgaria: BDA – II International: HD – II, priority species	**Initial Assessment** presence of the species	Conservation of shrub vegetation and undergrowth. Ban on replacement of deciduous plantations with conifer and non-typical species. Development of fire prevention and fire control plans. Prohibition for drainages and modification of water balance. Ban on the use of insecticides (unless extremely necessary, at that only biological and species-specific).
80	*Carabus intricatus* (Linnaeus) Blue ground beetle	International: IUCN - NT; CORINE	***Final Assessment*** presence of the species	Prohibition for felling of riparian forests, uprooting of stumps and modifying of the hydrological balance of rivers. Ban on conversion of deciduous plantations to conifer.

Abbreviations:

DB – Red Data Book of Bulgaria, 2011, Category of threatened species: Critically Endangered (CR); Endangered (EN); Vulnerable (VU) – Vulnerable; Near Threatened (NT); Least Concern (LC); Data Deficient (DD); Not Evaluated (NE).

BDA – Biological Diversity Act, with relevant appendices the species is listed in (e.g. II, III);

IUCN – International Union for Conservation of Nature, Category of threatened species: Critically Endangered (CR); Endangered (EN); Vulnerable (VU) – Vulnerable; Near Threatened (NT); Least Concern (LC); Data Deficient (DD); Not Evaluated (NE).

BeC – Bern Convention with relevant appendices the species is listed in (e.g. II, III);

BoC – Bonn Convention on Migratory Species with relevant appendices the species is listed in (e.g. II, III);

CITES – Washington Convention II; HD-II, IV

HD – Habitats Directive with appendices the species is listed in

BD – Birds Directive with appendices the species is listed in

Annex 2 of HCVF Toolkit: Critical concentrations of species

LIST FOR IDENTIFYING CRITICAL CONCENTRATIONS OF SPECIES IN BULGARIA AND PERIMETER OF NON-DISTURBANCE AREAS

Roosting of:

Black vultures roosting sites at least 30 days per year;	more than 5 birds use an area of 500 meters around the
Imperial eagles roosting sites at least 30 days per year;	more than 3 birds use an area of 300 meters around the
Pygmy cormorant roosting sites at least 30 days per year;	more than 15 birds use an area of 300 meters around the
Herons (all species) roosting sites at least 30 days per year;	more than 30 birds use an area of 200 meters around the
Storks and birds of prey the roosting sites at least 30 days per year.	more than 100 birds use an area of 300 meters around

Occurrence and colonies of bats in forest areas:

All species of bats sites (crevices in rocks, in caves and hollow trees)	more than 20 specimens, area of 100 meters around the

Occurrence, wintering sites and breeding ponds for amphibians in forest areas:

Frogs, toads and salamanders	more than 10 speciments use the pond for breeding; area of 50 meters around the water body;
Aquatic turtles	more than 4 specimens use the pond; area of 100 meters around the water body;
Terrestrial tortoises	locality with more than 4 specimens within an area of 50 x 50 meters
Snakes	more than 4 specimens or more than 4 sheddings; area of 100 meters from the locality

Existing courting grounds of capercaillie (*Tetrao urogallus*) with 2-5 male birds; area of 500 m
Existing courting grounds with more than 5 courting males; area of 700 m

Areas where more than two bears congregate for feeding (not counting the yearlings and two-year- old bears); area of 500 m

Areas where traces of lynx, otter or marten are often found or the species are directly observed; area of 500 m in diameter

Rutting areas of deers (*Cervus elaphus*) – all the rutting sites; area – the whole subunit where the rutting site is located.

Areas of invertebrate congregations – areas with old hollow trees, dead standing and fungi covered trees – namely the trees are the area where non-disturbance shall be ensured.

Annex 3 of HCVF Toolkit: HCV 2 forest areas in Bulgaria

LIST OF STATE FOREST MANAGEMENT UNITS IN BULGARIA AND THE FOREST COMPARTMENTS WITHIN THEM THAT ARE IDENTIFIED AS HCV 2

State FMU	Forest compartments with HCV 2

Aitos	1-385, 402-423, 425-454, 456-589, 591-595, 598-631, 634-642, 645, 648, 650-651, 654, 677-681, 688-691
Alabak	1-71, 124-557
Aramliets	1-3, 11-21, 38-63, 73-91, 143-154, 161-176, 224-242, 254-257, 259-292, 294-297, 301-310, 312-316, 318, 1145-1147, 1151-1158, 1265-1268
Ardino	1-2, 4, 6-7, 9-10, 23-29, 31-35, 59-169, 174-253, 257-286, 289-332, 349-360, 372-387, 400-407
Asenovgrad	1-374
Batak	1-168
Beglika	1-33, 46-61, 65-77, 94, 96-225
Belitsa	30, 42-47, 51, 54, 56-61, 64-107, 111-121, 127-133, 146-207
Belovo	4, 6-8, 16-20, 45-60, 62-64, 70-138, 141-143, 145-147, 150-156, 158-356, 362-378, 382-426, 441-449
Beogradchik	44-58, 102-108, 124-156, 273, 355-370, 399-412, 421-426, 432-435, 439-450, 464-471, 473-477, 484-489, 515-530
Berkovitsa	1-7, 10-13, 17-25, 68-132, 135-169, 192-193, 198, 200-306, 308-314, 316-326, 349-353, 356-358, 360-364, 368-371
Beslet	1-267, 272-294, 300-494, 509-515, 520-525, 527-530, 597, 721-726, 751
Blagoevgrad	1-11, 15-22, 25-28, 33-34, 37-51, 59-90, 97-146, 149-151, 153-170, 172-192, 202, 209-220, 222, 227-241, 243-250, 255-279, 284-291, 293-312, 317-326, 331, 334
Boliarka	1-144, 146-174, 176-234, 361-409, 503-506, 508-514, 567-574, 591
Borima	1-111, 114-115
Borino	1-11, 13-52, 59, 61-72, 74-101, 103-174, 180-181, 190, 193-200, 202-220, 252-257, 268-270, 405-408, 411-415
Borovo	1-237, 239-244, 252-265, 267-283
Botevgrad	1-34, 53-62, 65-132, 134-141, 144, 147-263, 275-282, 294-296, 417-519, 522-524, 526-530, 534-536, 539-551, 553-561, 601-604, 606-612, 617-623, 625-626, 701-711, 716-719, 802, 804, 815, 819, 822, 825, 827
Breznik	1-2, 4-9, 25-54, 57-61, 102-154, 159, 161-174
Buinovtsi	1-230, 297-301, 306-307, 316-321, 370
Burgas	37-41, 43-94, 96-173, 177-181, 235-262, 313, 316, 355-361, 363-414, 539-543
Biala	22-61, 311-313, 325
Varna	213-256, 265-282, 284-310, 312-313, 315-452, 477-478
Vidin	83, 191-204, 268, 351-357, 362, 381, 390-391, 393-403, 411-412, 414, 417-458, 469
Vitinia	1-134, 202-203, 264-274, 344-416, 628-632, 888-903, 992-1012, 2001-2015
Vitoshko	1-17, 22-164

Voden	64-143
Vratsa	1-66, 70-77, 82-83, 85-88, 90-120, 126-142, 270, 360-361, 365
Vurbitsa	1-239, 241-249
Gabrovo	1-151, 153-168, 172-173, 192-196, 199-201, 256, 266-272, 275-277, 279-331, 338
Govezhda	1-84, 86-173, 180-206, 215-222, 239-241, 257-258
Godech	1-84, 89-167, 175
Gorna Oriahovitsa	1-3, 5-25, 27, 31-43, 48-50, 54-56, 59-65, 155-188, 193-204, 206-218, 220-221, 230-241, 278-282
Gotse Delochev	24-35, 37-46, 49-66, 68-71, 73-205, 208, 217, 219, 222-242, 245-357, 359-360, 366-407, 410-416, 442-480, 485-527, 529-532, 536-553, 565-582, 585-588, 590-599, 601-603, 605-617, 621-635, 639-650, 652-654, 656
Gramatikovo	1-206, 212-223, 233-380
Gurkovo	1-8, 10-13, 19-249, 257-292
Devin	49-64, 68-101, 106-108, 110-112, 146-147, 149-190, 196-273, 311, 318-320, 323-325, 328-331
Dzhebel	1-160, 162-180, 182-222, 458-459
Dikchan	3-6, 9, 13-19, 46-123, 126-243, 245-292, 294, 300, 305-370
Dobrinishte	1-17, 21-25, 27, 32-160, 162-167, 169-199
Dospat	1-253, 257-267, 271-352
Dupnitsa	1-84, 97-106, 113-114, 117-131, 136-143, 150-153, 159-176, 182-183, 187-189, 193-199, 225-265, 268-272, 274-275, 277, 279-280, 282-295, 301-323, 325-330, 332-333, 335-337, 352-354, 363-403, 407-425, 438-439, 444-460, 465-492, 505-506, 510-511, 704, 802, 804
Elena	10, 13-122, 124-200, 202-296, 302-305, 308-315, 319-320, 322-369, 371-475
Eleshnitsa	2-8, 16-254, 260-267, 270-302, 325
Elin Pelin	16-114, 120-124, 126-127, 145-148, 153, 159-194, 204-206, 208-209, 211-253, 258, 298-300, 317, 319-341, 344-382, 384-386, 415-416, 421-484
Elhovo	153-155, 162-173, 176-306, 382-385, 465-466, 470-477, 497
Etropole	1-26, 59-99, 108-181, 184-194, 199, 203, 207-349, 401-407, 409-411, 413-415, 417-418
Zhenda	1-204, 206-208, 210-249, 251-264, 266-267, 278-287, 296-301, 304-306, 510, 558, 578, 581, 639-649, 685-693, 741-747, 783, 1101-1102, 1108, 1113, 1122-1123, 1129, 1140, 1145-1146
Zvezdets	1-271, 274-305
Zemen	1-101, 103-191, 199-219, 230-238, 240, 243-265, 276-286
Zlatograd	1-535

Ivaylovgrad	1-459, 463-694
Izvora	1-53, 131-136, 1029-1039, 1046-1048, 1073, 1100
Iskar	23377
Ihtiman	1-37, 48-50, 59-72, 93-113, 115-142, 155-160, 177-468, 474-506, 509-517, 524-525, 527, 532-570
Kazanlak	100-153, 158-161, 164-166, 168-175, 177-243, 261-329, 339-377, 395, 401-432, 435-498, 510, 513-514, 518-520, 522-523, 900, 920
Karakuz	248-266, 272-281, 284-303, 310-342, 348, 703, 1071-1105, 1138-1166, 1168-1177
Karlovo	1-178, 180-181, 183, 187-189, 287-306, 308, 420-421, 423-434, 485-500, 503-518, 542-558, 560, 566-583, 586-609, 612, 701-707, 719-724, 726-727, 729-735, 740
Karnobat	1-100, 108-119, 124-321, 402-407
Katuntsi	20-29, 34-54, 56-306, 308-309, 311-320, 322-344, 346-361, 363-400, 402-424, 427-519, 521-532
Kirkovo	1-24, 26-29, 32-43, 45-284, 286-456, 459
Klisura	4, 6-8, 12-13, 16-30, 32-84, 86-138, 158
Koprivshtitsa	9001-9030, 9032-9122
Kormisosh	1-22, 25-96, 106-109, 112-239, 245-290, 301-327, 329-400
Kostenets	1-15, 20-34, 36, 43-50, 52, 78-128, 146-299, 301-338, 362-372, 375-376
Kosti	1-14, 16-65, 73-146, 151-159, 203-232
Kotel	1-419, 426-443, 445-446, 450-510, 1001-1181
Kresna	1-39, 47, 51-147, 196, 199, 206, 209-257, 259-270, 274-279, 284-421, 427-454
Krichim	1-150, 153-157
Krumovgrad	1-14, 24-129, 132-223, 227-363, 371-397, 426-766
Kurdzhali	242-243, 245-246, 248, 299, 302-303, 306-308, 321-327, 329-331, 341, 343-353, 357-420, 422-456, 458-472, 475-493, 496-510, 513-557, 559-577, 579-580, 582-614, 616-638, 650-684, 693-740, 1140, 1176, 1186, 1188, 1195, 1220, 1226, 1234-1235, 1240, 1247, 1250
Lesidren	8-12, 16-104, 139-146, 149-150, 152-155, 1023, 1151-1153, 1156-1181, 1183
Lovech	182-210, 343-386, 432, 438-444, 446-452, 454, 478
Mazalat	102-108, 120-122, 124-126, 138-169, 178-179, 191-222, 224-454, 459-477, 501-507, 601, 615-622, 627-629, 632, 634-643, 648-699, 1254
Malko Tarnovo	1-3, 5-12, 20-52, 55-56, 61-109, 112, 115-286, 290-329
Mezdra	1-107, 111-123, 224-264, 313-315, 318-324, 341-349, 351
Mesta	126-220, 225-309, 313, 316-327
Midzhur	85-101, 109-123, 436-439, 451-463, 472-473, 478-483, 489-517

Mihalkovo	1-256, 339-340, 342-346, 348-349
Momchilgrad	223-226, 228-251, 253-271, 273-295, 299-303, 306-314, 316-457, 460-465
Montana	201-214, 226-238, 365-373, 378-383, 385, 387, 389-390, 396
Mugla	1001-1043, 1045-1048, 1064-1086, 1100-1109, 1138-1144
Muglizh	1-12, 15-17, 21, 24-126, 130-136, 138-245, 254, 258-271, 273-347, 349, 351-356
Nevestion	1-103, 105-112, 115-164, 166-170, 177-179, 205-207, 211, 215-227, 231-241, 243-359
Nesebar	1-41, 50-96, 100-114, 151-294, 296-475, 477-550, 553, 555, 557-558, 564, 568-571
Nova Zagora	20, 26-27, 29-33, 36-116, 118-137, 167-171
Novo Panicharevo	1-204, 207-232, 250-254, 257-268, 283-431
Omurtag	1-5, 27, 29-57, 77-79, 82-83, 85-224, 367-368, 372, 376-384
Osogovo	1-34, 38-47, 51-91, 93-152, 154-192, 195-208, 210-249, 251-318, 320-350, 352-514, 519-549, 552-561, 567-596, 616-619, 622-734, 736-761, 765-770, 772-824, 826-830, 835, 837-868, 873-886, 991
Pazardzhik	1-68, 77-106, 114-152, 157, 159-205, 208-218, 222-233, 261-357, 383, 405-406, 408-413
Palamara	341-421
Pamporovo	23-26, 32-34, 45-47, 49-55, 58-143
Panagiurishte	4-10, 22-44, 64-268, 272-392, 394-407, 431-514, 522-540, 543-552, 559-576, 582-591, 623-661, 670, 700-702, 704-706, 710-711, 713
Petrich	1-148, 169-187, 199-200, 202-208
Petrohan	1-114, 120-211, 217-234
Peshtera	1-78, 80-86, 88-90, 95-104, 106-112, 119-255, 258-265, 271-292, 297-305, 308-314, 335-357, 359-361, 363-367
Pirdop	40-55, 58-117, 119, 121-159, 164-190, 194-209, 211-223, 243-264, 269-329, 331-497, 499-509, 511-755, 770-779, 781-797, 800-805
Plachkovtsi	1-27, 45-92, 95, 97-155, 157-189, 191-194, 198-199, 202-205, 207-248, 259-262, 300-316, 321
Plovdiv	1-6, 148-157, 164-495, 497-604, 612-613
Preslav	1-66, 74, 76, 90-110, 158, 160, 162, 167-248, 251
Provadia	30-46, 48-50, 161-213, 220-222
Parvomai	2-283
Radomir	2-26, 34-44, 46-48, 53-62, 74-82, 182-195, 205-230, 232-248, 254-355
Razgrad	171-173, 225
Razlog	1-16, 26-51, 54-73, 79-86, 96-98, 101-107, 124-133, 138-265, 267-273

Rakitovo	1-183, 193-201, 206-212, 215-261, 267-276, 278-339
Ribaritsa	1-62, 74-93, 129-141, 166-177, 193-204, 206-243, 1126-1175
Rilski manastir	1001-1018, 1045-1188, 1198-1199, 1203-1301, 1303-1304
Rodopi	1-110, 134-145
Rozino	1139-1157, 2001-2008, 2019-2021, 2023-2051, 2075-2089, 2100-2103, 2113-2122, 2130-2133, 2137-2138, 2140, 2142-2144, 2146-2147, 2150, 2152-2210
Ropotamo	174-176, 182-217, 233-249, 255-256, 263-282, 287-354, 362-363, 410-411, 413-417, 430-451, 455-460, 464-479, 491-525, 527, 1205-1206, 1269-1286, 1414
Rositsa	1-3, 8-10, 19-21, 32-39, 48-186, 191-204
Rusalka	44-49, 55, 59, 66, 68-127, 129-152, 155-156, 165-169, 178-183, 192-203, 205-207, 209-227
Sadovo	1-172, 174-282, 286-289, 295-302, 304-310
Samokov	13-47, 75-205, 207-259, 261-270, 274-287, 290-378, 381-402, 404-442, 485-660, 662-664, 687-701, 708-717, 719-720, 723-724, 727-728, 732-733, 736-739, 741-742, 747-752, 757, 759-768, 772-780, 785-786, 807-839
Sandanski	1-11, 19-27, 35-43, 47-98, 109-116, 126, 157-158, 161-165, 173-206, 209-230, 235-275, 279-300, 303-358, 366-369, 373-397, 601
Svilengrad	6-10, 15-16, 24-92, 117-142, 144, 217-369, 371-413, 421-426, 438-439, 450-451, 458, 462-467
Svoge	1-50, 52-513, 539-557, 562-612, 701-887, 904-968, 970-974, 977-991, 1013-1023, 1025-1026
Sevlievo	32-36, 41-54, 56-60, 65-79, 140-144
Selishte	1-325
Seslav	1001, 1010-1033, 1037-1053, 1065, 1067, 1199-1202
Silistra	179-275, 277, 284-342, 365, 398-406, 428-441, 443, 543-547, 549, 551-552, 607, 640-641, 807
Simitli	6-24, 29-226, 229-236, 238-265, 267-268, 270, 273, 277-288, 292-331, 334-423, 426-489, 502-516, 518-519, 521-524, 526-539
Slaveino	1-476
Sliven	1-438, 449-452, 455-503, 506-601, 603-614, 616-657, 701-752, 758-796, 799-806
Smilian	1-104, 106-385, 387-543, 546-594
Smolian	1-44, 48-64, 89, 91-92, 96-103, 133-143, 147-209, 2012-2036, 2038-2062, 2066-2087, 2089-2093, 2096-2160
Smiadovo	1-73, 75-197, 204-219, 230-265
Sofia	8-27, 32-37, 39-43, 45-84, 88-97, 102-107, 109-129, 137, 168-175, 177-193, 199-203,

	243-271, 275-299, 302-333, 345-497, 499-509, 511-542, 546-659, 665-690, 693-700, 715-746, 749-776, 1001, 1006-1009, 1012-1021, 1023-1033, 1041-1044, 1048-1052, 1054-1143, 1176-1180, 1182, 1777-1780
Sredets	22-95, 97-186, 188-283, 285-292, 294-303, 306-307, 309-345, 348-358, 365-366, 369, 376-505, 519-548, 553-589, 609-610, 613-614, 620
Stara Zagora	1-53, 55-84, 87-141, 145, 155-170, 199-224, 228-374, 431, 457-477, 479, 481-485, 489, 702, 705-706, 712-714, 716, 718, 720
Stara Reka	1-137
Staro Oriahovo	1-73, 75-77, 79-87, 103-105, 109-215, 219-407, 409-415
Tvarditsa	1-329, 333-396, 398, 432-439
Tervel	1-14, 90, 144-184
Teteven	59-125, 176-285, 287-295, 302, 1095-1107, 1159-1162, 1165-1168, 1193
Ticha	3-51, 53-107, 109-129, 135-201, 204, 206
Topolovgrad	23-24, 121, 124-138, 141-159, 169-219, 225-228, 230-298, 301-326, 328-347, 349-380, 385-390
Trigrad	1-7, 9-38, 40-110, 116-149, 175-179, 181-193, 200-202, 243-244, 249, 287-296, 298-299
Troian	1-4, 7-16, 18-19, 21-32, 45, 47-48, 51-55, 67-71, 73-75, 84-86, 90, 96-99, 102-113, 119-121, 125-138, 146, 149-164, 166-170, 173-182, 188-199, 201-208, 238-239, 245-248, 250-252, 254-255, 258-264, 294-295, 307, 413, 501-503, 505-506, 532, 544, 553, 557-558, 738
Tran	47-182, 245-251, 254, 260-282, 287-294, 296-309, 312-380, 382-478, 482-499, 521-550, 1289-1291
Tundzha	114-142, 299-304
Targovishte	18, 34-68, 72-93, 109, 209-279
Harmanli	1-5, 11-12, 62, 64-68, 72-96, 239-247, 251-278, 280-285, 302-594, 607-609, 638-639, 646-647
Haskovo	66-68, 132-133, 143-144, 146-159, 161-224, 272-274, 276-286, 313-314, 318, 327-353, 357-388, 390-394, 396-419, 533-619, 801
Hvoina	1-98, 143-315
Hisar	1-140, 143-145, 147-151, 163-228, 235, 237-274, 284-286, 315-319, 331-354, 368-379, 391-392
Tsaparevo	1-103, 105-121, 123-128, 134, 140-175, 177-241, 244-276, 284, 286-326, 328-331
Tsarevo	1-14, 16-103, 106-201, 203-451
Tsonevo	1-5, 8, 10-90, 94-104, 106-129, 135-206, 221-228, 232-263, 265-329, 331-352, 356

Chekeritsa	5-188, 198-210
Chepelare	1-5, 8-11, 14-35, 37-116, 275-276, 301-322, 326-332, 335-344, 348, 356-357, 360-361, 364
Chepino	28-52, 161-240, 253-256, 263-266, 272-321, 1072-1123
Cherni Vit	1001-1010, 1012-1051, 1074-1077, 1082-1088, 1095-1104, 1113-1121, 1124-1137, 1214-1251, 1253-1259
Cherni Lom	292-294, 299-306
Cherni Osam	5-12, 15-59, 67-71, 84-91, 96-111, 115-116, 174-194, 196-199, 201-227
Chehliovo	1-27, 53-160, 241-252, 257-262, 267-271
Chiprovtsi	1-163, 165-202, 204-206, 208-221, 389-390
Chirpan	1-24, 27-91, 93, 95-112, 116-136, 146-154, 166, 176-187, 200-207, 209-227, 229-239, 241-244, 246-247, 256-284, 296-301, 312, 320-321, 324-326, 378-394, 396-400
Chuprene	1-43, 50-113, 119-122, 124-156, 166-169, 189-207, 209-215, 217-222, 224-227, 229-257, 261, 273, 275-279, 283, 300, 307, 309
Sherba	11-237, 245-258
Shiroka Laka	1-8, 36-58, 62-73, 75-78, 80-110, 113-139
Shiroka Poliana	114-129, 138-295
Shumen	116-192
Iundola	1-195
Iakoruda	7, 19-47, 49-62, 65-74, 84-93, 95-123, 127-135, 143-147, 157-368, 411-412

Annex 4 of HCVF Toolkit: List of HCV ecosystems

LIST OF ENDANGERED, THREATENED WITH EXTINCTION OR ENDEMIC ECOSYSTEMS IN BULGARIA

No.	EUNIS	Name	Brief Description*
1	**G1.1112**	**Eastern European poplar-willow forests**	Riparian, most often mixed willow-poplar or only willow or poplar forests in lowlands and plains associated with the continental climatic conditions in North Bulgaria.

2	**G1.1216**	**Balkan Range grey alder galleries**	Mountain galleries dominated by white (grey) alder (Alnus incana), developing on alluvial soils along rivers in the mid-mountain fir-beech vegetation belt at altitudes that are higher compared to the similar forests of common alder and common ash.
3	**G1.2116**	**Dacio-Moesian ash-alder woods**	Mixed riparian gallery communities with common alder (Alnus glutinosa) as the main edificator. At places edificators and co-edificators are the grey alder (Alnus incana), oriental plane (Platanus orientalis) and common ash (Fraxinus excelsior). Different willow species, most often fragile willow (Salix fragilis) and white willow (S. alba) also participate in the community. This type of gallery forests occurs more often in the low mountain belt and more rarely in the mid-mountain belt.
4	**G1.2232 (0)**	**Helleno-Balkanic ash-oak-alder forests (Longos forests) s**	Floodplain dense forests composed of English (Quercus robur), narrow-leafed ash (Fraxinus angustifolia subsp. oxycarpa) and field elm minor) with the presence of climbing plants – excelsa, Periploca graeca, Clematis vitalba, helix, Tamus communis, Vitis vinifera subsp. sylvestris.
5	**G1.2232 (1)**	**Helleno-Balkanic ash-oak-alder forests (Humid lowland oak forests)**	Humid lowland forests dominated by English oak (Quercus robur) or pedunculate oak (Quercus pedunculiflora) with the participation of climbing though less than compared with the dense forests. Occurring mainly in the Danubian Plain and the of Ludogorie.
6	**G1.2232 (2)**	**Helleno-Balkanic ash-oak-alder forests (Thracian forests of *Quercus pedunculiflora*)**	The Thracian forests of Quercus pedunculiflora and robur are the driest subtype of lowland riparian In most cases represent old forests of relatively area surrounded by agricultural land. Climbing also occur, but much less than in dense Occurring in the Tundzha Plain and the Upper Lowland.
7	**G1.3155**	**Rhodopide Mediterranean poplar galleries**	Riparian forests occurring in plains and lowlands at the of larger rivers (Maritsa, Tundzha, Struma) Mesta, Veleka, etc) and their feeders. Typical plant species: Populus nigra, Populus alba, Salix alba.

8	**G1.381**	**Helleno-Balcanic riparian plane forests**	Forests along rivers and their feeders in the southern part of the country, dominated by oriental plane (Platanus orientalis). Typical plant species: Platanus orientalis, Alnus glutinosa, Salix spp., Castanea sativa, Ostrya carpinifolia, Juglans regia.
9	**G1.413**	**Southern Helleno-Balkanic swamp alder woods**	Floodplain forests of black akder (Alnus glutinosa), occurring in the lower reaches of rivers in the Black Sea – Mediterranean Basin. At places they have a detached, strip-like distribution along rivers, thus obtaining the character of "galleries". In some sections the narrow- leafed ash (Fraxinus oxycarpa) is sub-edificator.
10	**G1.6921/ G1.6931**	**Southeastern Moesian and Balkan Range acidophilous beech forests**	Forests dominated by beech, developing on poor and humid soils. Typical plant species: Fagus Luzula luzuloides, L. sylvatica, arundinacea, Pteridium aquilinum,Vaccinium V. vitis-idaea, Poa nemoralis.
11	**G1.6922/ G1.6923/ G1.6932/ G1.6933**	**Southeastern Moesian and Balkan Range neutrophile beech forests**	Mesophytic forests dominated by beech, developing neutral or close to neutral soils. They feature floristic composition of the herbaceous layer. plant species: Fagus sylvatica, Galium Anemone nemorosa, Lamiastrum galeobdolon, europea.
12	**G1.661**	**Middle European dry-slope limestone beech forests**	Beech forests developing on limestone. Typical plantspecies: Fagus sylvatica, Berberis vulgaris, Ligustrum vulgare, and representatives of the family of Orchidaceae.

13	**G1.69**	**Thermophilous Moesian beech forests**	Pure and mixed deciduous forests with common beech(Fagus sylvatica subsp. sylvatica и Fagus sylvatica subsp. moesiaca) as the main ediphicator. Occurring mostly in the foothills, low mountains and lower parts of the high mountains in the range of 100 to 1000(1300) m alt. at the conditions of moderate-continental and transitional continental climate. Featuring thermophilous nature, emphasized by the presence of species from the neighbouring oak, lime, hornbeam, etc. deciduous forests. Typical plant species: Acer hyrcanum, Corylus colurna, Ostrya carpinifolia, Quercus cerris, Q. frainetto, Q. dalechampii, Sorbus torminalis, Tilia tomentosa, Carpinus betulus.
14	**G1.6E11**	**Eastern Balkan Range oriental beech forests**	Forests dominated by oriental beech (Fagus orientalis) in the Eastern Balkan Mountains. Characteristic of these forests is the lack of undergrowth of evergreen euxinic elements and less euxinial elements in the herbaceous layer.
15	**G1.6E12**	**Stranja oriental beech forests**	Forests dominated by oriental beech (Fagus orientalis)in Strandza. Typical plant species: Rhododendron ponticum, Daphne pontica, Ilex colchica, Laurocerasus officinalis, Vaccinium arctostaphylos, Cyclamen coum, Primula vulgaris ssp. sibthorpii, Salvia forskaohlei, Symphytum tauricum, Trachystemon orientalis.
16	**G1.737**	**Eastern sub-Mediterranean white oak woods**	Forests of pubescent oak (Quercus pubescens) – pure or mixed with other thermophilous species.
17	**G1.76A41**	**Stranja** [*Primula rosea*]-**[Quercus polycarpa] forests**	Pure or mixed forests of oriental durmast (Quercuspolycarpa) in Strandzha and the Eastern Balkan Mountains.

18	**G1.7A1**	**Euro-Siberian steppe [*Quercus*] woods**	Forests dominated by Turkey oak (Quercus cerris) or pedunculate oak (Quercus pedunculiflora) on loess in the Danubian Plain, Ludogorie, and the Dobrudzha Plateau.

19	**G1.7C1**	**[*Ostrya carpinifolia*] woods**	Communities dominated by or with considerable participation of hop-hornbeam (Ostrya carpinifolia)
20	**G1.7C34**	**Moesian thermophilous maple woods**	Forests with participation of or dominated by Montpellier Maple (Acer monspessulanum). Typical plant species: Acer monspessulanum, Fraxinus ornus, Quercus pubescens, Syringa vulgaris, Prunus mahaleb
21	**G1.7C41**	**Silver lime woods**	Forests dominated by silver lime (Tilia tomentosa)
22	**G1.7D1**	**Helleno-Balkanic chestnut forests**	Pure and mixed natural stands and old plantations
23	**G1.7(E)**	***Cercis siliquastrum* forests**	Forests and thickets with participation of Judas tree (Cercis silisquastrum).
24	**G1.7642**	**Rila *Quercus protoroburoides* forests**	Communities dominated by Rila oak (Quercus protoroburoides).
25	**G1.9135**	**Illyro-Moesian montane birch woods**	Natural pure and mixed forests of Betula pendula with the participation of Fagus sylvatica, Picea abies, Pinus sylvestris, Abies alba, Pinus peuce and Populus tremula.
26	**G1.A4**	**Ravine and slope woodland**	Mixed deciduous forests on steep and precipitous sites.
27	**G1.A462 21**	**Balkan Range horse-chestnut ravine forests**	Forests dominated by horse chestnut (Aesculus hippocastanum)
28	**G1.A711**	**Western Euxinian mixed forests**	Mixed deciduous forests with the participation of tanniniferous oak (Quercus hartwissiana)

29	**G3.16**	**Moesian [*Abies alba*] forests**	Monodominant or mixed forests of silver fir (Abiesalba).
30	**G3.171**	**King Boris´s fir forests**	Mixed forests of common beech (Fagus sylvatica) and Bulgarian fir (Abies borisii-regis).
31	**G3.1E1**	**Southeastern Moesian [*Picea abies*] forests**	Monodominant and dominated by spruce forests in Vitosha, Rila, Pirin and Rhodope Mountains.
32	**G3.E32**	**Moesian Scots pine mire woods**	Forests of Pinus silvestris and Picea abies distributed on mires in the Western Rhodopes, Vitosha and Rila.
33	**G3.1E4**	**Balkan Range [Picea abies] forests**	Monodominant and dominated by spruce forests in the Western and Central Balkan Mountains.
34	**G3.4C**	**Southeastern European [*Pinus sylvestris*] forests (on limestone)**	Scots pine forests developing on limestone with fragmentary distribution in Pirin, Central Rhodopes and Slavyanka in the range of 1100–1400 m alt. Most often being monoedificator or mixed with participation of black pine.
35	**G3.561(1)**	**Helleno-Balkanic Pallas' pine forests**	Forests of black pine with relict nature. Typical plant species: black pine (Pinus nigra ssp. pallasiana).
36	**G3.561(2)**	**Mixed *Pinus nigra – Picea abies* fortests**	Natural mixed forests of Pinus nigra and Picea abies.
37	**G3.616**	**Rhodopide white-barked pine forests**	Natural xero-mesophytic monodominant and mixedforests of Pinus heldreichii with participation of Pinus mugo, Pinus nigra, Pinus sylvestris, Pinus peuce, Picea abies and Abies alba.
38	**G3.62**	**[*Pinus peuce*] woods**	Natural monodominant and mixed forests of Pinuspeuce with participation of Pinus mugo, Pinus sylvestris, Pinus heldreichii, Picea abies and Abies alba.
39	**G3.932**	**Peri-Rhodopide Grecian juniper woods**	Sparse forests dominated by Grecian juniper (Juniperusexcelsa).

40	**G4.6**	**Mixed [Abies] - [Picea] - [Fagus] woodland**	Mixed conifer-deciduous forests of common beech(Fagus sylvatica) and silver fir (Abies alba) and/or Norway spruce (Picea abies).
41	**G4.8(1)**	**Mixed [*Pinus peuce*] [*Fagus*] forests**	Natural mixed conifer-deciduous forests of Pinus peuce, Fagus sylvatica, Picea abies and Pinus sylvestris
42	**G4.8(2)**	**Mixed [*Pinus heldreichii*] [*Fagus*]forests**	Natural mixed conifer-deciduous forests of Pinus heldreichii and Fagus sylvatica.
43	**G4.8(3)**	**Mixed non-riverine deciduous and coniferous woodland**	Forests with the participation of black pine (Pinus nigra) and hop-hornbeam (Ostrya carpinifolia)

* For more information refer to: http://eunis.eea.europa.eu/habitats-code-browser.jsp;
Biserkov, V., Gussev, Ch., Popov, V., Hibaum, G., Roussakova, V., Pandurski, I., Uzunov, Y., Dimitrov, M., Tzonev, R., Tzoneva, S. (ed.) 2011. Red Data Book of the Republic of Bulgaria, Volume 3. Natural Habitats". IBER – BAS& MoEW, Sofia

Annex 4A of HCVF Toolkit: Forest management activities for HCV ecosystems

MANAGEMENT CHARACTERISTICS AND RECOMMENDED FOREST MANAGEMENT ACTIVITIES FOR ECOSYSTEMS IN ANNEX 4 (PRIORITY NATURAL FOREST HABITATS WITH NATIONAL AND EUROPEAN IMPORTANCE)

Some of the forest habitats in Annex 4 have similar characteristics, which make possible to unify them in groups specified below with their particularities and guidance for management.

Natural riparian forests dominated by willows, poplars and alders.
These are communities with rich biodiversity, which often sustain unique flora and fauna species. They are with critical importance for protection and erosion control, and also aesthetic value. They are under negative anthropogenic impact during last decades. In order to save these forests it is recommended to stop any management activities in their land. If decision for management of these forests is taken than the forestry management activities have to be directed to each tree and biogroup. Clear cuttings and gradual regeneration cuttings shall not proceed. The trees and biogroups along the rivers have not to be logging object. Protection of key biodiversity elements have to be provided – deadwood, trees with

hollows and etc. Inventory in regions occupied by these kinds of habitats has to be made and management plans have to be developed. Recovering, where it is possible, normal water supply regimes, which will prevent the spread of exotic species (amorphata, American ashl-tree). The destruction of riparian willow belts along the rivers have to be stopped and have to search ways for keep balance between areas occupied with intensive poplar plantations and natural riparian ecosystems, dominated by willows, poplars and alders and etc. Support natural regeneration of native species (willows, poplars and alders). Actions for improvement of forest security and prevention of logging in alder trees have to be undertaken. Make restrictions for reduction of areas occupied by this type of habitats for infrastructure or other project purpose, increase of arable land and etc.

Natural beech forest

Diversity of forestry systems has to be implemented in order to provide biological diversity in this basic forest group. The share of selected cuttings (group selected cutting) and cuttings with long recovery period have to be increased. They will help in development of irregular spatial structure, which will provide richer habitat diversity. Likewise they will help in protection of dendrology diversity. Cultivation activities have to be made on time in order to improve sustainability of young plantations. Different growing phases of beech communities have to be presented during the planning process and forestry activities Special attention has to be taken to protection of the plantations, in “old growth forests” stage. Protection of key biodiversity elements has to be provided – islands of old age, trees with hollows, leisure zones and etc. Priority in offspring beech forests management has to be their transformation into seed forests. Protection functions of beech stands with low timber effect have to be taken into account. Management activities implemented in endemic communities of Fagus orientalis in Strandga have to be restricted. For recovery activities through afforestation only native origins and species have to be used. Activities for improvement of forest protection have to be taken. Prohibition of decreases areas for infrastructure and other projects purposes.

Natural forests dominated or sub-dominated by different oak species

Clear cuttings have are not permitted in this communities and pasture of domestic cattle have to be restricted in these areas. Loggings with long recovery period have to be increased in order to develop irregular spatial structure and varied species composition. Cultivation activities have to be made on time in order to improve sustainability of young plantations. Different growing phases of oak communities have to be presented during the planning process and forestry activities Priority is given to protect plain
oak forests, which are natural islands of biodiversity in plains (Chirpanska and Aitovska koriaand etc.). Protection of key biodiversity elements has to be provided – islands of old age,

trees with hollows, leisure zones and etc. Priority in offspring oak forests management has to be their transformation into seed forests. Discontinue the reconstruction of low productive habitats and give priority to natural vegetation and succession processes. These types of forests are vulnerable to anthropogenic influence and therefore they don't have to be used for timber production. Priority has to be given to natural recovery and during afforestation only native species and origins have to be used. Activities for improvement of forest protection have to be taken. It is not recommended decreasing of areas for purposes of infrastructure and other project, increasing the arable lands and etc.

Natural pure and mixed natural plantations of Betula pendula with the participation of beech

This community consists of two tree species with contrast ecological characteristics, which point the question about its sustainability in time. Its current state is due to anthropological influence, express in cuttings, grazing and burning down the native species. Its long-term existence is possible in the diverse micro – habitats territory with different characteristics. For example slopes with combination of comparatively humid areas and deeper soils (gullies) and parts with humidity deficit and infertile, rocky soil.

The long-term dynamics of species composition will depend on the combination of habitat micro- conditions. The participation of birch, which is pioneer species, will decrease and will be saved only in places where it has competitive priority – very rocky soils and humidity deficit.

Beside its crucial anti erosion importance, the birch can be taken as a "source" for birch spreading into adjacent non-forested areas. Its aesthetic value also has to be taken into account.

The forestry activities have to keep the mixed plantations but not to interrupt their natural dynamic, i.e. not to keep the birch in places where it has no competitive priority.

Tilia tomentosa natural forests

In plantations in good condition have to extend cuttings and to implement appropriate cultivation activities. Strict control has to be taken during the gathering of blossoms for economic purpose and prevention of cutting branches and whole trees for this purpose.

Forests with Abies alba and Abies borisii-regis

Fir-tree is appropriate species for implementation of selection management and cuttings with long

recovery period. Implementation of gradual cutting has to be restricted with exception where purpose is habitat richness. Cultivation activities have to be made on time in order to improve sustainability of young plantations. Different growing phases of fir-tree communities have to

be presented during the planning process and forestry activities Special attention has to be taken to protection of the plantations “old growth forests” stage. Protection of key biodiversity elements has to be provided – islands of old age, trees with hollows, leisure zones and etc. The forests with Abies borisii-regis have to be included as part of protected areas, because of their endemic character. Development of management plans for protected areas and implementation of forestry activities complying with biology and ecology of the species.

Coniferous forests on the upper timberline with conversion to pine-scrub communities

These forests have only protective importance and therefore implementation of forestry activities is not recommended. When in some cases forestry activities are needed, they have to imitate natural dynamics and recovery processes for this kind of species.

Monodominates and forests with domination of spruce in Vitosha, Rila, Pirin and Rodopi

Spruce forests are appropriate species for implementation of selection management and cuttings with long recovery period. Implementation of gradual cutting has to be restricted with exception when the purpose is achievement of habitat richness. Cultivation activities have to be made on time in order to improve sustainability of young plantations. Different growing phases of spruce communities have to be presented during the planning process and forestry activities Special attention has to be taken to protection of the plantations in “old growth forests” stage. Protection of key biodiversity elements has to be provided – islands of old age, trees with hollows, leisure zones and etc. Activities for recovery of habitats in areas not occupied by forests or in regions where no afforestation is carried out but are suitable for forests have to be undertaken.

Pinus nigra natural forests

Different forestry systems have to be applied, not only gradual cutting, like the usual practice. The usage of rocky Pinus nigra forests has to be prohibited.

Different growing phases of Pinus nigra communities have to be presented during the planning process and forestry activities. Anti-fire measures have to be developed. Protection of key biodiversity elements has to be provided – islands of old age, trees with hollows, leisure zones and etc. Development of protected areas management plans , which include forests with natural Pinus nigra communities.

Mixed spruce and Pinus nigra forests

Implementation of forestry activities has to be done in order to protect mixed pattern of the plantations.

Group-selected and irregular gradual cutting with bigger sizes are recommended, which will provide recovering of Pinus nigra. Cutting rotation period in these forests has to be increased.

Pinus heldreichii forests

Main loggings are prohibited.

The reduction of areas for infrastructure or other project purposes is prohibited.

Pinus peuce forests

Different forestry systems have to be implemented in forestry management of Pinus peuce forests in order to provide diverse habitats. Cultivation activities have to be made on time in order to improve sustainability of young plantations. Different growing phases of Pinus peuce communities have to be presented during the planning process and forestry activities. Protection of key biodiversity elements has to be provided – islands of old age, trees with hollows, leisure zones and etc. Habitats management plan included in protected areas has to be developed. Activities for recovery of habitats in areas not occupied by forests or in regions where no afforestation is carried out but are suitable for forests have to be undertaken. Anti-fire measures have to be developed. The reduction of areas for infrastructure or other project purposes is prohibited.

Coniferous forests on peat bogs

Spruce and Pinus silvestris natural forests situated in high mountains, over peat bogs. They have restricted areas (around 200ha) in Vitosha and Rodopes mountains. Inventory of the regions occupied by these kinds of habitats has to be made. Any kind of loggings has to be prohibited. Increasing the habitats area, parts of protected territory. Habitat management plan has to be developed.

Mixed deciduous-coniferous forests

Implementation of forestry activities has to be done in order to protect mixed pattern of the plantations. Cultivation activities have to be made on time in order to improve sustainability of young plantations. Different growing phases of the plantations and different tree species have to be presented during the planning process and forestry activities. Special attention has to be taken to protection of the plantations in “old growth forests” stage. Protection of key biodiversity elements has to be provided – islands of old age, trees with hollows, leisure zones and etc.

Old growth forests

Old growth forests (OGF) with their specific structure and functionality are habitat for complex of species from different ecological and taxonomy groups. Due to lack of knowledge about OGF it is difficult to define how much of the surveyed species are connected only to these forests but definitely can be concluded that many of the species found in OGF optimal living conditions. Even more during the comparison between OGF and younger forests essential differences in the biodiversity are found which is an indicator for the unique of these systems. At least 5% from the territory of the FMU have to be separated to provide old growth forests. Particularly suitable for this purpose are 100 years old natural forests, which were not under anthropogenic influence. In this forest group can be included forest plantations when necessary. It is recommended that the OGF have relatively an even distribution over the territory, as the area of one old growth forests complex is no less than 40 ha. The connectivity of these complexes with OGF corridors has to be provided.

The natural dynamic of the defined plantations has to be kept in order to reach the characteristics of the OGF. The forestry activities and loggings in their territories are not permitted except during huge natural damages (wind throw and calamities occupying over 30% of the OGF area). Other exceptions of the rule are the forest plantations. They require forestry activities to provide their sustainability and the process of structural differentiation. Approximately 160 to 230 years are needed for forest with characteristics of OGF to be formed. The transformation from mature forests to OGF is gradual and its duration depends on forest composition (the species reach mature for different periods of time), habitat conditions (the period is shorter in good habitat conditions compared to bad conditions) and primary structure of the plantations (in homogeneous structure is slower than the heterogeneous).

Annex 5 of HCVF Toolkit: Preliminary assessment for HCV 5

METHODOLOGY FOR IDENTIFICATION OF HVF 5. PRELIMINARY ASSESSMENT

This HCV differ from biological and environmental values in participation of local communities into the forest management. The preliminary assessment identifies communities that are potentially dependent on forest resources.
In Bulgaria the following resources characterize HCV 5 according to the level of community dependency on them, existence of easily accessible replacements and interaction with other HCVs:

- Firewood and wood for other daily needs
- Pasture

- Fodder – hay and leaf mass
- Mushrooms
- Other non-timber resources – medicinal plants, forest fruits, snails, products from hunting (trade non-timber forest products, like caught animals, resins, fruits, etc.)
- Water supply (drinking and other daily needs water (see HCV 4.1).

Some of these uses might contravene local laws (for example when people extract timber or use other resources without an official/legal permission) or contradict other HCVs (for example when people hunt or use in another way protected species). During the identification/ preliminary assess-ment, the assessor must identify by the inclusion method all the potential usages of forest re-sources, without prejudice of the legality and sustainability of these uses of the forest by the people.

In Bulgaria HCVs can be all LFFF, which are parts of settlements or settlement formations in undeveloped rural areas (defined under Regulation 105/02.06.1999 of MRDPW), the set-tlements have no electricity neither developed road infrastructure (difficult of access, no asphalt roads). The LFFF are up to 5 km away from the settlement borders, and are identified by verification of critical importance through inquiry with local people.

The forest managers/users have to identify whether the community for which existence the forest is with crucial importance is falling into the undeveloped areas list – Annex 5A. Managers have to verify the list periodically for updates.

Sources of information/data:
- the Ministry of Regional Development and Public Works Departments;
- Agriculture and Forests Directorates at the District authorities.

Annex 5A of HCVF Toolkit: Undeveloped rural areas in Bulgaria

LIST WITH UNDEVELOPED RURAL AREAS IN BULGARIA, DEFINED UNDER REGULATION 105/02.06.1999 OF MRDPW

1. Straldga (district with administrative center Yambol)
2. Kotel (district with administrative center Sliven)
3. Dolni chiflik, Dalgopol(district with administrative center Varna)
4. Suvorovo(district with administrative center Varna)
5. Varbitza, Smiadovo(district with administrative center Shumen)
6. Antonovo, Omurtag(district with administrative center Targovishte)

7. Tervel (district with administrative center Dobritch), Alfatar and Kainardga(district with administrative center Silistra)
8. Kaolinovo, Venetz, Nokola Kozlevo, Hitrino (district with administrative center Shumen)
9. Tutrakan, Glavinitza, Sitovo(district with administrative center Silistra), Zavet, Kubrat(district with administrative center Razgrad) and Slivo poljie(district with administrative center Rousse)
10. Loznitza, Samuil (district with administrative center Razgrad)
11. Dve mogili, Borovo, Tzenovo(district with administrative center Rousse), Opaka(district with administrative center Targovishte) and Tzar Kaloian(district with administrative center Razgrad)
12. Zlataritza, Stragitza(district with administrative center Veliko Tarnovo)
13. Guliantzi(district with administrative center Pleven)
14. Ugarchin(district with administrative center Lovech)
15. Knega, Oriahovo(district with administrative center Vratza) and Iskar(district with administrative center Pleven)
16. Biala Slatina, Mizia, Hairedin, Borovan, Krivodol(district with administrative center Vratza)
17. Lom, Boichinovtzi, Brusartzi, Valchedram, Medkovetz, Iakimovo(district with administrative center Montana)
18. Varshetz(district with administrative center Montana)
19. Belogradchik, Boinitza, Bregovo, Gramada, Dimovo, Kula, Novo selo, Rougintzi(district with administrative center Vidin)
20. Tran(district with administrative center Pernik) and Trekliano(district with administrative center Kiustendil)
21. Nevestino(district with administrative center Kiustendil)
22. Stroumiani(district with administrative center Blagoevgrad)
23. Belitza, Iakorouda (district with administrative center Blagoevgrad)
24. Garmen(district with administrative center Blagoevgrad)
25. Devin, Borino(district with administrative center Smolian)
26. Velingrad, Rakitovo(district with administrative center Pazardgik)
27. Strelcha(district with administrative center Pazardgik)
28. Rakovski, Sadovo(district with administrative center Plovdiv) and Bratia Daskalovi(district with administrative center Stara Zagora)
29. Pavel Bania(district with administrative center Stara Zagora)
30. Mineralni bani(district with administrative center Haskovo)

31. Ardino(district with administrative center Kardgali)
32. Kirkovo(district with administrative center Kardgali)
33. Stambolovo(district with administrative center Haskovo)
34.Topolovgrad(district with administrative center Haskovo

Annex 6 of HCVF Toolkit: Full assessment for HCV 5

METHODOLOGY FOR IDENTIFICATION OF HCV5. FULL ASSESSMENT. MANAGEMENT AND MONITORING OF HCV5 FORESTS.

The full assessment of this HCV always requires consultation. After conclusion that the community uses the forest for some basic needs, the Full Assessment identify whether a forest is with crucial importance to them. Therefore different methods are used depend on the socio-economic context and the specific need. Sometimes the forest manager will need guidance from social scientists that specialize in the region. However consultations with the community itself are always helpful, like described in the Appendix.

STEP 1: IDENTIFICATION OF ISOLATION AND DEVELOPMENT OF INFRASTRUCTURE OF LOCAL COM-MUNITY

If local community included in the list of Undeveloped Rural Areas – Annex5A, then have to verify whether the settlement has electricity, the level of road infrastructure development, and the level of isolation. If the settlement meets the requirements of HCV 5, then goes on to next step.

STEP 2: IDENTIFYING SUB-GROUPS IN EACH VILLAGE BASED ON THEIR LIVELIHOOD PATTERN

Villages in Bulgaria usually consist of sub-groups with different ethnic origins and livelihood patterns. Before the identification of each value importance starts, the interviewers have to divide villages in sub-groups according to their livelihood pattern, like in the following table. This information can usually be obtained from the village leaders or other key informants.

Table 1 – Identification of sub-groups within one village community

Table 1 – Identification of sub-groups within one
village community

№	Ethnic group/origin	Main sources of livelihood	Other key characteristics (i.e. date of arrival, location	Approximate number of households	% of village population

Each group, which represents at least 15% of the village population, should be considered as a significant sub-group and should be interviewed separately – either through individual interviews or through group interviews in which only one sub-group is represented.

STEP 3: IDENTIFY HOW EACH SUB-GROUP MEETS ITS BASIC NEEDS

The following table is proposed for each sub-group, as a guide for individual or group interviews. The purpose of this table is to identify how different types of resources, including forest resources as well as alternative resources such as agriculture, fishing, crafts, market, or government assistance, forest company development programmes or NGOs, meet each of the sub-group basic needs.

The table was tested in several communities in other countries, with different level of forest de-pendency, and it appeared to be easily understood, enabling a good and active people participation and a good group interaction. A small group of participants (5 to 15) needs about one hour to fill the table. However the people who make the interviews can change the model according to their knowledge, experience and local conditions.

The table can be used for individual interviews but this can make the procedure take longer time. It is more efficient in terms of time to use the table with small groups of people on a group consultation meeting. The perfect number of people is from 5 to 15. This can be used for different small groups representing different sub-communities depending on ethnic group, livelihood pattern, age and gender.

Regarding the gender, it is important to provide women participation, since they usually have a different share in resource usage. Women are usually involved more in the gathering of particular forest products, such as medicinal plants and forest fruits, and probably have a different opinion about their importance. In other countries mixed gender group discussions tend to be dominated by men. In order to get an appropriate representation of women's point of view, separate group discussions with women can be organized.

Table 2 - Satisfaction of Basic Needs

Village:……. Sub-Group (based on table 1):…….						
Needs	Sources					
	Forest or land from the forest fund	Agriculture (cultivation), stock- breeding	Purchase/ Trade	Aid	Others (e.g. fishing – amateur and sports fishing should be	Explanations, notes

	FMU						
Wood: - Firewood							
For other everyday needs							
For materials (construction, farming, tools)							
Food for animal: - Pasture							
- Fodder (hay, leaf mass)							
Non-timber products: - Mushrooms							
- Medicinal							
- Fruits							
- Resins							
- Snails, other uses of animals, hunting							
Drinking and other daily							
Cash income							
Others							

Instructions for filling the table

The table can be reproduced on a large piece of paper and put on the wall of the house or other building where the consultation is taking place. The facilitator then explains the purpose of the consultation and proceeds to ask villagers where from they derive each of the main resources in the table below, and the respective importance of each resource.

For example, the facilitator might ask the community about their main fuel, e.g. firewood; the main source of this fuel and how they obtain it. Villagers will usually list the most important source first, and then other sources. For each source the facilitator asks the villagers whether they derive all their wood from this source (ranking: 4); most of their needs are satisfied from it (ranking: 3), a significant part of their needs (2), only a tiny, marginal part of their needs (ranking: 1), or none at all (0).

Then in each cell, the facilitator indicates ranking from 1 to 4 as explained below, and lists the corresponding resources, e.g. “dry fallen mass”, “blueberries”, “struts”, “stakes for agriculture”, etc. The importance of each source for each need is determined with the following levels:

4 - Essential = 100% of a given need is satisfied by one source (for example, if all the water used by the community comes from the forest’s rivers, put “4 (all)” in the “forest” column in the “water” row).

3 – Critical = more than 50% of a given need is satisfied by one source.

2 - Important = between 15% and 50%.

1 - not important = less than 15%. 0 – non-existent = 0%.

Not all the cells have to be filled, but at least all the ones with a value above 2 should be filled. Likewise, all cells in the column “forest” should be filled to make sure that the importance of the forest is carefully evaluated. Depending on the circumstances, the column “forest” can be split in two or not. If the interviewed group lives in the middle of the Forest Management Unit under evaluation, then everything they derive from the forest is likely to be from the FMU (in case it is large enough). If the community is near the border of the FMU or often moves beyond its borders, then it might be necessary to clarify what percentage of their resources they draw from the FMU and what is the percentage derived from another forest.

It is important to realize that it is not necessary to ask communities to fix these percentages. If they are ready to give such percentages, they can be used to classify the importance of each resource in the categories from 1 to 4 above. However, it should be remembered that communities are not used to keeping quantified records of their needs and resource uses, so percentages given during inter-views can be very misleading. Rather than trying to obtain figures, which would require months of data collecting, it is recommended to base the identification of fundamental resources on the qualitative perception of the people, which will be a more adequate indicator.

The levels from 1 to 4 can easily be obtained during individual or group discussions. In ordinary language, farmers to qualify the importance of a source satisfying a particular need could use the following expressions:

For example, the following questions can be asked for qualitative identification of each level: “Do you get all your fruits from the forest or there are other sources?” . If the answer is “all” then the level is 4 for the forest in the line “fruits”.

If there are other sources, for example a garden, then the following question can be asked: "Do you get more fruits from the forest or from the garden?". If the answer is "more from the forest", then the level is 3.

If the answer is "more from the garden" then the following question can be asked:

"Do you get a significant portion of fruits from the forest or just very little, seldom, and not in an important way?" If the answer is "significant, rather important", then the answer is 2, if the answer is "marginal, occasional, or not important", then the answer is 1.

Some resources may become critical only at certain times of the year, or during crop failures, as a replacement. For example, mushrooms collected from the forest could not be a main resource in times of drought. If the community qualifies a certain forest resource as marginal, always check that this is the case all year long and all the time, for example by asking "are there certain times when it becomes more important?" If the answer is yes, then the importance of the resource should be moved to 2 (significant) and if there is no replacement during that period, it is an HCV.

If no fruits at all are derived from the forest, then obviously the level is 0.

For each need for which the forest is considered as "not important" or "nonexistent" (value 0 or 1) in satisfying it, the forest is not fundamental and will not be qualified as a HCV.

STEP 4. IDENTIFYING FUNDAMENTAL FOREST FUNCTIONS

For each need for which the forest has been ranked between 2 and 4 as a source (important, critical or essential), the consultation has to be more thorough. The table below should be filled, which will establish the readiness of alternatives and whether they are within the reach of the people.

Changes are important to consider. If a given resource from the forest is being less and less used and more and more replaced by alternative uses, this may disqualify a resource as fundamental. This is especially true when people are investing in alternative sources, for example if they are developing cash crop plantations that will make them less dependent on NTFP for cash needs. This criterion is especially important for 'ambiguous' cases, when it is difficult to decide whether the resource is fundamental or not.

Questions in the table below will help to find out whether the resource is fundamental or not. It indicates whether the community has access to satisfying replacements of the forest resources or not. Each resource that has no accessible and satisfying replacement is a HCV. Again this table is proposed as a guide; local groups or researchers may develop their own models to suit their needs.

Table 3 - Identifying fundamental forest resources

Village: ***XXX***……..	**Sub-Group:** (based on table 1) ***2***

Forest resource (e.g. firewood, wood for construction, hay), based on table 2	**Ranking of the forest's importance in meeting this need (2 to 4), based on table 2**
If the need cannot be met by the corresponding forest resource, are there available alternatives?	Make list of the alternatives. If there are none, the resource may be a HCV. If there are some, continue with the rest of the table.
Are these alternatives available: - All year long every year, - In sufficient quantities to replace the forest resources, - And in an accessible	If the answer is "no" to one of these questions: there may be a HCV. If the answer is yes to all questions: continue below.
If yes, can they be obtained for free or would there be a cost involved (for example, cash needed to buy and transport a replacement,	If the replacement is available for free (for example, free medicines at the village dispensary), this is not a HCV. If there is a cost, continue below.
If there is a cost, is it within the reach of all the people (for example do they have enough cash to buy it, or do they have	If no: Fundamental/HCV; If yes: not fundamental.
enough labour and land to start a new agricultural production as replacement?)	
Is there a trend of change in people's dependency on this resource? For example, are they less and less using the rivers for water, or is the collection of NTFPs declining? If there is a trend of change	In case of hesitation about the importance of a resource, the obvious declining trends in the use of the forest, affecting the community as a whole, may disqualify the forest from being fundamental, especially if people are actively investing in new, alternative sources such as agriculture. On the contrary, if the community is actively protecting the forest resources, then it is a HCVF.

IMPORTANT: if the forest is fundamental for meeting even only one of the basic needs mentioned in table 2, this is sufficient to qualify the corresponding resource as a HCV.

STEP 5. IDENTIFYING SUSTAINABLE FOREST USES COMPATIBLE WITH OTHER HCVS

As mentioned above, HCVs do not cover excessive uses of forest resources beyond sustainable levels, or uses that are not compatible with the maintenance of other HCVs. Such uses of forests by communities, once identified, have to comply with the other principles of HCVF management. However, it is important to re-member that the focus here is the lifestyle of local communities. If the local communities themselves make a forest use unsustainable, then this use is not a HCV – unless communities have firmly decided to reverse this trend. If the communities use the resource in a sustainable way, but external parties endanger the resource, then the use of the forest by the local community is still a HCV that needs to be protected from external threats.

Table 4 – Identifying sustainable forest uses compatible with other HCV

Village: ***XXX***……..	**Sub-Group:** (based on table 1) ***2***
Forest resource (for example firewood, wood for construction, drinking water, etc.), based on table 2	**Importance of the forest for meeting the need (from 2 to 4), based on table 2**

For how long has the community used the resource?	Recent uses of the forest compelled by market development and not bound by traditional regulations may not be sustainable. Uses that have existed for at least a generation might be sustainable, unless there have been changes in availability and extraction levels (see next questions).
Are these resources used in a sustainable manner, i.e. do the villagers think that they can continue to sustain present use/harvest level	If the answer is yes, and unless there are indications of the contrary from other questions, then the resource use is probably sustainable. Always use the questions below to confirm.

Has there been a declining trend in the availability of this resource during the last 5/10 years? (for example, mushrooms getting more rare, timber sources farther from the village…)? Is this change due to external parties, or to the activities of the community itself (for example increased levels of extraction, conversion of the forest…)?	If the resource availability is significantly declining because of the communities' own activities, and/or if they forecast its exhaustion, this may not be a HCV, unless communities express their will to change the trend.
Does the use of the resource by the community threaten other HCVs (endangered species for example)?	Besides consultation with communities, this will require discussions with an ecologist.
Does the community hope, plan or want to reverse this trend? Are there some rules that are followed by the community to regulate the use of this resource? Are the villagers ready to introduce such rules	If the resource is declining or threatening other HCVs, but the communities are ready to do something to counter this trend, then this may still qualify as a HCV.

These questions should not always be asked straightforward, the best is to en-gage people in an informal discussion. The first indicator of resource exhaustion is not usually the fact that higher levels of inputs are needed to sustain the same level of output. For example, villagers may have to walk longer distances to find the fruits they need. Another indicator is the reduced quality of the harvested resource, for ex-ample people logging trees in areas of smaller and smaller size.

GUIDANCE FOR MANAGEMENT OF HCV 5

1. Identification of threats and sources of threats for identified HCVs. and evaluation of the potential harmful effects of forest operations over these resources.
2. Identification of possible conflicts between ecological and social as-pects of HCVFs.
3. Work with communities to identify specific territories with this HCV which management have to be coordinated with particular FMU.
4. When this HCV is identified, the forestry plans and projects ac-tivities and strategies for municipalities development have to be revised according to HCV protection.

GUIDANCE FOR MONITORING OF HCV 5

1. Determine the current status and trends in the status of HCV5
2. Use the results from the monitoring to revise and adjust the forestry plans and projects activities and strategies for municipalities' development.

Annex 7 of HCVF Toolkit: Religious places of critical importance

List of holy places for Christians and Muslims in Bulgaria situated in or adjacent to forests

Orthodox monasteries.

Monasteries under the direct jurisdiction of the Holy Synod

1. Bachkovski "Uspenie Bogorodichno" - with a holy spring (aiazmo) and chapels outside the monastery
2. Rilski "Sveti Ivan Rilski" (with aiazmo outside the monastery)
3. Troianksi "Uspenie Bogorodichno"

Vidinska eparchy:

4. Albutinski monastery cut in the rocks – village of Rabovo (XIII century)
5. Brusarski "Sveti Arhangel Mihail"
6. Dobridolski "SvetaTroitza" (with a holy spring)
7. Izvorski "Uspenie Bogorodichno" (with a holy spring)
8. Klisurski monastery "Sveti Kiril & Metodi"
9. Chiprovsk I "Sveti Ivan Rilski"
10. Rakovishki "Sveta Troitza"
11. Lopushanski "Sveti Joan Predtecha"

Vrachanska eparchy:

12. Dolnobeshovishki "Sveti Arhangel Michail"
13. Matnishki "Sveti Nikolai"
14. Cherepishki "Uspenie Bogorodichno"
15. Strupezki "Sveti Prorok Ilia"
16. Bistretzki "Sveti Ivan Rilski"

Lovchanska eparchy:

17. Botevgradski ”Rojdestvo Bogorodichno”
18. Vracheshki ”Sveti Georgi Pobedonosetz”
19. Glozhenski ”Sveti Georgi”
20. Etropolski ”Sveta Troitza”
21. Praveshki ”SvetiTeodor Tiron”
22. Tetevenski ”Sveti Prorok Ilia”
23. Karlukovski ”Sveta Bogoroditza”
24. Chekotinksi ”Sveti Arhangel Michail”
25. Zlatishki ”Sveto Vzanesenie Gospodne”
26. Novoseski ”Sveta Bogoroditza”
27. Skravenski ”Sveto Preobrazhenie”

Velikotarnovska eparchy:

28. Batoshevski ”Sveta Bogoroditza”
29. Sokolovski ”Uspenie Bogorodichno”
30. Drianovski ”Sveti Arhangel Michail”
31. Kilifarevski ”Sveta Bogoroditza”
32. Preobrazhenski ”Preobrazhenie Gospodne”
33. Patriarsheski ”Sveta Troitza”
34. Liaskovski ”Sveti Petar&Pavel”

Dorostolo-Chervenska eparchy:

35. Ivanovski churches and monasteries cut in the rocks (natural reserve, cultural site with global importance, protected by UNESCO)
36. Karan Varbovka villages “Sveta Petka” (with a holy spring in the yard)

Varnensko-Preslavska eparchy:

37. Aladzha monastery
38. Preslavski monastery “Sveti Kirli & Metody”

Plovdivska eparchy:

39. Batkunski “St Peter&Pavel” (village of Patalenitza)
40. Gorno vodeski “Sveti Kirik & Iulita”
41. Muldavski “Sveta Petka Muldavska”
42. Monastery ”Sveta Troitza” in Krastova gora
43. Sopotski “Sveta Bogoroditza”

Starozagorska eparchy:

44. Maglizhki ”Sveti Nikolai Mirikliiski”
45. Chirpanski ”Sveti Atanasii Veliki”

Sofiiska eparchy:

46. Alinski “Sveti Spas”
47. Batulia “Sveti Nikola”
48. Bistrishki “Sveta Petka”
49. Bilinksi “Sveti Arhangel Michail”
50. Boboshevski “Sveti Dimitar”
51. Bukurovski “Sveti Georgi Pobedonosetz”
52. Mislovishki (Velinovski) “Sveta Bogoroditza”
53. Germanski “Sveti Ivan Rilski”
54. Giginski ”Sveti Kozma & Damian”
55. Goleshki “Sveti NikolayLetni”
56. Gornovasilishki “Sveto Vaznesenie”
57. Dragalevski “Sveta Bogoroditza”
58. Divotinski “Sveta Troitza”
59. Dolnolozenski “Sveti Spas”
60. Dolnopasarelski ”Sveti Petar & Pavel”
61. Eleshnishki “Sveta Bogoroditza”
62. Zemenski “Sveti Ioan Bogoslov”
63. Zhablianski “Sveti Ioan Predtecha”
64. Iskretski “Sveta Bogoroditza”
65. Kokalianski “Sveti Arhangel Michail”
66. Kremikovski “Sveti Georgi”
67. Kurilovski “Sveti Ivan Rilski”
68. Leva reka “Sveti 40 machenitsi”
69. Odranitza ”Sveti Petar & Pavel”
70. Osenovlashki “Sveta Bogoroditza”(Sedemte prestola)
71. Peshterski “Sveti Nikola”
72. Razboishki “Sveta Bogoroditza”
73. Radiboshki “Sveva Troitza”
74. Seslavski “Sveti Nikolay”
75. Transki “Sveti Arhangel Michail”
76. Shumski “Sveti Arhangel Michail”

Nevokopska eparchy

77. Gornobreznishki “Sveti Prorok Ilia”
78. Gotzedelchevski ”Zhivopriemnii iztochnik” (with holy spring)
79. Rozhenski “Rozhdestvo Bogorodichno”
80. Troskovski “Sveti Arhangel Michail”
81. Hadzhidimovski “Sveti Georgi Pobedonosets”

MUSLIM MONUMENTS

Teketo hamlet, Haskovo region – ritual center with a tomb of Osman baba
Bivoliane, Haskovo region –tomb of Elmala baba
Dambala locality, Momchilgrad region – three tombs and a healing spring
Zvezdelina, Momchilgrad region – tomb of Siurmeli baba
Gasak hamlet, Momchilgrad region – tomb of Kazer baba
Postnik hamlet, village of Nanovitza, Momchilgrad region – tomb of Ahat baba
Podkova, Momchilgrad region – Mosque of the seven virgins (cemetery forest)
Dazhdovnik, Krumovgard region – tomb of Yamur baba
Nova Zagora – tomb of Kademli baba
Balchik – tomb of An Iazal baba
Isperih – tomb of Demir baba

11. FSC Glossary of Terms

Adaptive management: A systematic process of continually improving management policies and practices by learning from the outcomes of existing measures. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website).

Affected stakeholder: Any person, group of persons or entity that is or is likely to be subject to the effects of the activities of a Management Unit. Examples include, but are not restricted to (for example in the case of downstream landowners), persons, groups of persons or entities located in the neighborhood of the Management Unit. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0)

Alien species: A species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; based on Convention on Biological Diversity (CBD), Invasive Alien Species Programme. Glossary of Terms as provided on CBD website).

Applicable law: Means applicable to The *Organization** as a *legal** person or business enterprise in or for the benefit of the Management Unit and those laws which affect the implementation of the FSC Principles and Criteria. This includes any combination of statutory law (Parliamentary-approved) and case law (court interpretations), subsidiary regulations, associated administrative *procedures**, and the national constitution which invariably takes legal* precedence over all other legal* instruments. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0).

Best Available Information: Data, facts, documents, expert opinions, and results of field surveys or consultations with stakeholders that are most topical, credible, accurate, complete, and/or pertinent and that can be obtained through *reasonable effort** and cost, subject to the *scale** and *intensity** of the management activities and the *Precautionary Approach**. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Biological control agents: Organisms used to eliminate or regulate the population of other *organisms**. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Based on FSC-STD-01-001 V4-0 and World Conservation Union (IUCN). Glossary definitions as provided on IUCN website).

Biological diversity / Biodiversity: 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 a part; this includes diversity within species, between species and of ecosystems. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; based on Convention on Biological Diversity 1992, Article 2).

Biotope trees

Standing live or dead trees with specific characteristics that are actual or potential habitat for living *organisms**, including: old trees; hollow trees or trees with nests, trees with significant coverage of mosses, lichens and mushrooms, single trees in open spaces; high /higher than the average/ trees at the edge of the forest; trees with indications to be used by animal *organisms**; trees that provide food base; groups of trees with significant landscape value and/or biological nature. (Source: Definition developed by the Bulgarian NSDG)

Confidential information: Private facts, data and content that, if made publicly available, might put at risk The Organization*, its business interests or its relationships with stakeholders, clients and competitors. This may be information that is shared by agreement between two parties who are not entitled to share this information with third parties. This is all business information that the relevant company does not want to be publicly available. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; the definition is complemented by the Bulgarian NSDG to bring more clarity in the Bulgarian context)

Connectivity: A measure of how connected or spatially continuous a corridor, network, or matrix is. The fewer gaps, the higher the connectivity. Related to the structural connectivity concept; functional or behavioral connectivity refers to how connected an area is for a process, such as an animal moving through different types of landscape elements. Aquatic connectivity deals with the accessibility and transport of materials and *organisms**, through groundwater and surface water, between different

patches of aquatic ecosystems of all kinds. (Source: FSC IGIs Glossary; Based on R.T.T. Forman. 1995. Land Mosaics. The Ecology of Landscapes and Regions. Cambridge University Press, 632pp).

Conservation/Protection: These words are used interchangeably when referring to management activities designed to maintain the identified environmental or cultural values in existence long-term. Management activities may range from zero or minimal interventions to a specified range of appropriate interventions and activities designed to maintain, or compatible with maintaining, these identified values. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0).

Conservation zones and protection areas: Defined areas that are designated and managed primarily to safeguard species, *habitats**, ecosystems, natural features or other site-specific values because of their natural environmental or cultural values, or for purposes of monitoring, evaluation or research, not necessarily excluding other management activities. In the context of Bulgaria protected areas are the sites(zones) of the European ecological network Natura 2000 designated under the Biological Diversity Act (BDA) and protected areas designated under the Protected Areas Act (PAA). For the purposes of this standard the definition of "*conservation** zones and protection areas", except the territories under BDA and PAA includes certain HCVF, and other areas designated and managed by the organization in order to protect natural and cultural values. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0 FSC; the definition is complemented by the Bulgarian NSDG to bring more clarity in the Bulgarian context).

Critical: The concept of criticality or fundamentality in Principal 9 and HCVs relates to irreplaceability and to cases where loss or major damage to this HCV would cause serious prejudice or suffering to *affected stakeholders**. An ecosystem service is considered to be *critical** (HCV 4) where a disruption of that service is likely to cause, or poses a threat of, severe negative impacts on the welfare, health or survival of *local communities**, on the environment, on HCVs, or on the functioning of significant infrastructure (roads, dams, buildings etc.). The notion of criticality here refers to the importance and risk for natural resources and environmental and socio-economic values. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0).

Criterion (pl. Criteria): A means of judging whether or not a Principle (of FSC) has been fulfilled. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V4-0).

Culturally appropriate (mechanisms / ways): Use of tools and approaches for reaching target groups (*local communities** and other *interested stakeholders**), which are in harmony with their customs, values, sensitivity, culture and lifestyle. Cultural characteristics may be associated with religious, traditional or purely technical capabilities and preferences of local people. Cultural characteristics of a community can exclude the possibility of communication through letters or just the opposite - only the written communication can be acceptable. In other cases, the cultural characteristics may require communication to happen in certain places and at certain times for people and to be used language suitably adapted to be understood from the stakeholders or other measures may have to be taken to

ensure effective communication. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; the definition is complemented by the Bulgarian NSDG to bring more clarity in the Bulgarian context)

Customary law: Interrelated sets of customary rights may be recognized as customary law. In some jurisdictions, customary law is equivalent to statutory law, within its defined area of competence and may replace the statutory law for defined ethnic or other social groups. In some jurisdictions customary law complements statutory law and is applied in specified circumstances. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Based on N.L. Peluso and P. Vandergeest. 2001. Genealogies of the political forest and customary rights in Indonesia, Malaysia and Thailand, Journal of Asian Studies 60(3):761–812).

Customary rights: Rights which result from a long series of habitual or customary actions, constantly repeated, which have, by such repetition and by uninterrupted acquiescence, acquired the force of a law and are not contradictory to existing national legislation. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V4-0; the definition is complemented by the Bulgarian NSDG to meet the national specifics).

Deadwood: A collection of inanimate wood biomass in the forest (except the forest floor), which is the result of natural processes and rotting or from forestry operations. Deadwood consists of standing dead wood (standing dead trees and broken stems, resulting from natural processes was) lying dead wood (fallen and uprooted trees, stems and branches as a result of natural processes and logging activities) and stumps (part of the base of the stem which remains after cutting it). (Source: Definition developed by the Bulgarian NSDG)

Dispute: An expression of dissatisfaction by any person or organization presented as a complaint to the Organization*, relating to its management activities or its conformity with the FSC Principles and Criteria, where a response is expected (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; based on FSC-PRO-01-005 V3-0 Processing Appeals).

Economic viability: The capability of developing and surviving as a relatively independent social, economic or political unit. Economic viability may require but is not synonymous with profitability. (Source: IGIs Glossary; Based on the definition provided on the website of the European Environment Agency).

Ecosystem: A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Convention on Biological Diversity 1992, Article 2).

Ecosystem function: An intrinsic ecosystem characteristic related to the set of conditions and processes whereby an ecosystem maintains its integrity (such as primary productivity, food chain, biogeochemical cycles). Ecosystem functions include such processes as decomposition, production, nutrient cycling, and fluxes of nutrients and energy. For FSC purposes, this definition includes ecological and evolutionary processes such as gene flow and disturbance regimes, regeneration cycles and ecological seral development (succession) stages. (Source: FSC IGIs Glossary FSC-STD-60-004

V1-0; Based on R. Hassan, R. Scholes and N. Ash. 2005. Ecosystems and Human Well-being: Synthesis. The Millennium Ecosystem Assessment Series. Island Press, Washington DC; and R.F. Noss. 1990. Indicators for monitoring biodiversity: a hierarchical approach. Conservation Biology 4(4):355–364).

Ecosystem services: The benefits people obtain from ecosystems. These include: provisioning services such as food, forest products and water; regulating services such as regulation of floods, drought, land degradation, air quality, climate and disease; supporting services such as soil formation and nutrient cycling; and cultural services and cultural values such as recreational, spiritual, religious and other non-material benefits. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Based on R. Hassan, R. Scholes and N. Ash. 2005. Ecosystems and Human Well-being: Synthesis. The Millennium Ecosystem Assessment Series. Island Press, Washington DC).

Engaging / engagement: The process by which The Organization communicates, consults and/or provides for the participation of interested and/or *affected stakeholders** ensuring that their concerns, desires, expectations, needs, rights and opportunities are considered in the establishment, implementation and updating of the Management plan*. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0).

Environmental values: The following set of elements of the biophysical and human environment:

- *ecosystem functions** (including carbon sequestration and storage);
- *biological diversity**;
- water resources;
- soils;
- atmosphere;
- *landscape values** (including cultural and spiritual values).

The actual worth attributed to these elements depends on human and societal perceptions (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0).

Externalities: The positive and negative impacts of activities on stakeholders that are not directly involved in those activities, or on a natural resource or the environment, which do not usually enter standard cost accounting systems, such that the market prices of the products of those activities do not reflect the full costs or benefits. Examples of different types of negative externalities are different types of pollution as a result of forest management activities and the destruction of certain types of *organisms** and ecosystems, deterioration of the local microclimate due to inappropriate silvicultural activities and others. Examples of positive e externalities are: provision of drinking water from the well-kept forests in water catchment areas, providing clean air, microclimate with healing qualities, providing access to the forest for recreation and gathering *non-timber forest products* * due to the construction of forest roads, the provision of good conditions for aesthetic enjoyment, creating good conditions for the existence of genetic and biological diversity in forests that are managed in a nature friendly way and

others. Some of the positive externalities are can be characterized as *ecosystem services**, whose value was not calculated and not taken into account. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0; this definition is complemented by the Bulgarian NSDG to to bring more clarity in the national context).

Fair compensation: Remuneration that is proportionate to the magnitude and type of services rendered by another party or of the harm that is attributable to the first party. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Favourable Conservation Status:

To determine the favourable status of species and habitats*, the following indicators are used:

1. The conservation status of a **species** will be taken as "favourable" when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis;

2.The conservation status of a **natural habitat** will be taken as "favourable" when:

- its natural range and areas it covers within that range are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable as defined above.

(Source: EU Habitat Directive)

Fertilizer: Mineral or organic substances, most commonly N, P_2O_5 and K_20, which are applied to soil for the purpose of enhancing plant growth. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Forest: A tract of land dominated by trees:

1. that covers area not smaller than 1 decare(0,1 ha), height of adult trees not less than 5 m., width of stand measured between the stams of endmost trees not less than 10 m. and projection of tree crowns not less than 10 of 100 from the area of the stand;
2. areas that are in process of regeneration and have no yet reached the minimumcrown projection (10 of 100) and the minimum height of trees 5 m., but are soon expected to reach those minimum levels;
3. areas which as a result of human interference or because of other reasons are temporarily without trees but are to be regenerated;
4. protection forest belts and lines of trees larger than 0.1 ha and width over 10 m.;
5. forest stands into systems and facilities for protection from the destructive impacts of water;
6. Pinus mugo formations;

7. Communities of trees and bushes along *water bodies**.
(Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; FSC-STD-01-001 V5-0. Derived from FSC Guidelines for Certification Bodies, Scope of Forest Certification, Section 2.1 first published in 1998, and revised as FSC-GUI-20-200 in 2005, and revised again in 2010 as FSC-DIR-20-007 FSC Directive on Forest Management Evaluations, ADVICE-20-007-01; this definition is complemented by the Bulgarian NSDG to meet the specifics of the national context and legislation and more specificly the definition for a forest according to the Bulgarian Forestry Act).

Forest cultures: Forests created through afforestation or planting, or by using combined methods (natural and artificial regeneration), often consisting of one or several species at the same age and with even spatial structure. Forest cultures, which over time have acquired basic characteristics and key elements of the natural forest ecosystems can be considered as *natural forests**, and their regeneration will not be considered for conversion. In the Bulgarian context the main difference between Forest cultures and Plantations is that short rotations are not planned and implemented in Forest cultures. Thus, they often have or gain many of the characteristics of natural forests. (Source: Definition developed by the Bulgarian NSDG to meet the national specifics and terminology)

FMU: See the definition of “Management Unit”

Free, Prior, and Informed Consent (FPIC): A *legal** condition whereby a person or community can be said to have given consent to an action prior to its commencement, based upon a clear appreciation and understanding of the facts, implications and future consequences of that action, and the possession of all relevant facts at the time when consent is given. Free, prior and informed consent includes the right to grant, modify, withhold or withdraw approval. (Source: Based on the Preliminary working paper on the principle of Free, Prior and Informed Consent of Indigenous Peoples (…) (E/CN.4/Sub.2/AC.4/2004/4 8 July 2004) of the 22nd Session of the United Nations Commission on Human Rights, Sub-commission on the Promotion and Protection of Human Rights, Working Group on Indigenous Populations, 19–23 July 2004).

FSC certified (product): FSC certified material that is eligible to carry an FSC label and to be promoted with the FSC trademarks. (Source: FSC-STD-40-004 V2-0)

FSC Standard / Forest Stewardship Standard: The normative document which specifies the requirements with which a forest management enterprise must conform in order to obtain certification. (Source: FSC-STD-20-002 V2-1)

Gender equality: Gender equality or gender equity means that women and men have equal conditions for realizing their full human rights and for contributing to, and benefiting from, economic, social, cultural and political development. (Source: Adapted from FAO, IFAD and ILO workshop on ‘Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty’, Rome, 31 March to 2 April 2009.).

Genetically modified organism: An organism in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination. (Source: Based on FSC-POL-30-602 FSC Interpretation on GMO (Genetically Modified Organisms)).

Genotype: The genetic constitution of an organism. (Source: FSC-STD-01-001 V5-0).

Growing stock of the stand: The total amount of wood in the stand expressed mostly by its volume (m3). (Source: Definition developed by the Bulgarian NSDG)

Habitat: The place or type of site where an organism or population occurs. (Source: Based on the Convention on Biological Diversity, Article 2).

Habitat features: *Forest** stand attributes and structures, including but not limited to:

- Old commercial and non-commercial trees whose age noticeably exceeds
- the average age of the main canopy;
- Trees with special ecological value (*biotope trees**);
- Vertical and horizontal complexity;
- Standing dead trees;
- Dead fallen wood;
- Forest openings attributable to *natural disturbances**;
- Nesting sites;
- Small *wetlands**, bogs, fens;
- Ponds;
- Areas for procreation; (Birds and deer coupling places, hollow trees, entrances of caves, rock crevices, etc.).
- Areas for feeding and shelter, including seasonal cycles of breeding;
- Areas for migration;
- Areas for hibernation. (Areas used for hibernation or winter shelters, for example dens of bears, winter gatherings of pygmy cormorant, hollow trees and entrances to caves used by bats, etc.).

(Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; complemented by NSDG)

High Conservation Value (HCV): Any of the following values:

- HCV1: Species Diversity. Concentrations of *biological diversity** including endemic species, and *rare**, *threatened** or endangered species, that are *significant** at global, regional or national levels.
- HCV 2: Landscape-level *ecosystems** and mosaics. *Intact Forest Landscapes**, large landscape-level *ecosystems** and *ecosystem** mosaics that are *significant** at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

- HCV 3: *Ecosystems** and *habitats**. *Rare**, *threatened**, or endangered ecosystems, *habitats** or *refugia**.
- HCV 4: Critical *ecosystem services**. Basic *ecosystem services** in *critical** situations, including *protection** of water catchments and control of erosion of vulnerable soils and slopes.
- HCV 5: Community needs. Sites and resources fundamental for satisfying the basic necessities of *local communities** or Indigenous Peoples* (for example for livelihoods, health, nutrition, water), identified through *engagement** with these communities or *Indigenous Peoples**.
- HCV 6: Cultural values. Sites, resources, habitats and *landscapes** of global or national cultural, archaeological or historical significance, and/or of *critical** cultural, ecological, economic or religious/sacred importance for the traditional cultures of *local communities** or *Indigenous Peoples**, identified through *engagement** with these *local communities** or *Indigenous Peoples**. (Source: based on FSC-STD-01-001 V5-0).

High conservation value forests (HCVF): Forest areas that have at least one of the six high *conservation** values as defined by FSC. (See the above definition for HCV)

High Conservation Value Areas: Zones and physical spaces which possess and/or are needed for the existence and maintenance of identified *High Conservation Values**.(Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Income for provision: The income for provision is the basis on which the obligatory insurance taxes are being calculated and paid by the employers. For the employees this is the gross monthly payment which they receive. Annual minimal incomes for provision are being defined by the Law on the budget of state social insurance for all occupations. (Source: Definition developed by the Bulgarian NSDG)

Indicator: A quantitative or qualitative variable which can be measured or described, and which provides a means of judging whether a Management Unit* complies with the requirements of an FSC Criterion. Indicators and the associated thresholds thereby define the requirements for responsible forest management at the level of the Management Unit* and are the primary basis of forest evaluation. (Source: FSCSTD-01-002 V1-0 FSC Glossary of Terms (2009)).

Indigenous Peoples: People and groups of people that can be identified or characterized as follows:

- The key characteristic or Criterion is self-identification as Indigenous
- Peoples at the individual level and acceptance by the community as their member;
- Historical continuity with pre-colonial and/or pre-settler societies;
- Strong link to territories and surrounding natural resources;
- Distinct social, economic or political systems;
- Distinct language, culture and beliefs;
- Form non-dominant groups of society;

- Resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities.

(Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Adapted from United Nations Permanent Forum on Indigenous, Factsheet 'Who are Indigenous Peoples' October 2007; United Nations Development Group, 'Guidelines on Indigenous Peoples' Issues' United Nations 2009, United Nations Declaration on the Rights of Indigenous Peoples, 13 September 2007).

Intact Forest Landscape: a territory within today's global extent of forest cover which contains forest and non-forest ecosystems minimally influenced by human economic activity, with an area of at least 500 km2 (50,000 ha) and a minimal width of 10 km (measured as the diameter of a circle that is entirely inscribed within the boundaries of the territory). (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Intact Forests / Global Forest Watch. Glossary definition as provided on Intact Forest website. 2006-2014).

Intensity: A measure of the force, severity or strength of a management activity or other occurrence affecting the nature of the activity's impacts. (Source: FSC-STD-01-001 V5-0).

Interested stakeholder: Any person, group of persons, or entity that has shown an interest, or is known to have an interest, in the activities of the *Organization** in the *Management Unit**. (Source: FSC-STD-01-001 V5-0)

Internationally accepted scientific protocol: A predefined science-based procedure which is either published by an international scientific network or union, or referenced frequently in the international scientific literature. (Source: FSC-STD-01-001 V5-0).

Invasive species: Species that are rapidly expanding outside of their native range. Invasive species can alter ecological relationships among *native species** and can affect *ecosystem function** and human health. (Source: Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website).

Landscape: A geographical mosaic composed of interacting ecosystems resulting from the influence of geological, topographical, soil, climatic, biotic and human interactions in a given area. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website).

Landscape values: Landscape values can be visualized as layers of human perceptions overlaid on the physical landscape. Some landscape values, like economic, recreation, subsistence value or visual quality are closely related to physical landscape attributes. Other landscape values such as intrinsic or spiritual value are more symbolic in character and are influenced more by individual perception or social construction than physical landscape attributes. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Based on website of the Landscape Value Institute)

Large scale natural disturbances: See the definition for *natural disturbances** in the current glossary

Legal: In accordance with primary legislation (national or local laws) or secondary legislation (subsidiary regulations, decrees, orders, etc.). 'Legal' also includes rule based decisions made by

competent authorities where such decisions flow directly and logically from the laws and regulations. Decisions made by *legally competent** agencies may not be legal if they do not flow directly and logically from the laws and regulations and if they are not rule-based but use administrative discretion. (Source: FSC-STD-01-001 V5-0).

Legally competent: Mandated in law to perform a certain function. (Source: FSCSTD-01-001 V5-0).

Legal registration: National or local *legal** license or set of permissions to operate as an enterprise, with rights to buy and sell products and/or services commercially. The license or permissions can apply to an individual, a privately-owned enterprise or a publicly-owned corporate entity. The rights to buy and sell products and/or services do not carry the obligation to do so, so *legal** registration applies also to Organizations operating a Management Unit without sales of products or services; for example, for unpriced recreation or for conservation of biodiversity or habitat. (Source: FSC-STD-01-001 V5-0).

Legal status: The way in which the *Management Unit** is classified according to law. In terms of *tenure**, it means the category of *tenure**, such as communal land or leasehold or freehold or State land or government land, etc. If the *Management Unit** is being converted from one category to another communal indigenous land) the status includes the current position in the transition process. In terms of administration, legal status could mean that the land is owned by the nation as a whole, is administered on behalf of the nation by a government department, and is leased by a government Ministry to a private sector operator through a concession. (Source: FSC-STD-01-001 V5-0).

Living wage: The remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; A Shared Approach to a Living Wage. ISEAL Living Wage Group. November 2013).

Local communities: Communities of any size that are in or adjacent to the *Management Unit**, and also those that are close enough to have a significant impact on the economy or the *environmental values** of the Management Unit or to have their economies, rights or environments significantly affected by the management activities or the biophysical aspects of the Management Unit. (Source: FSC-STD-01- 001 V5-0).

Local laws: The whole suite of primary and secondary laws (acts, ordinances, statutes, decrees) which is limited in application to a particular geographic district within a national territory, as well as secondary regulations, and tertiary administrative procedures (rules / requirements) that derive their authority directly and explicitly from these primary and secondary laws. Laws derive authority ultimately from the Westphalian concept of sovereignty of the Nation State (Source: FSC-STD-01-001 V5-0).

Long-term: The time-scale of the forest owner or manager as manifested by the objectives of the *management plan**, the rate of harvesting, and the commitment to maintain permanent forest cover. The length of time involved will vary according to the context and ecological conditions, and will be a function of how long it takes a given ecosystem to recover its natural structure and composition

following harvesting or disturbance, or to produce mature or primary conditions (Source: FSC-STD-01-002 V1-0 FSC Glossary of Terms (2009)).

Management activities: All activities assigned or implemented by the Organization * incl. administrative tasks forest management activities, planning, monitoring and others. (Source: Definition developed by the Bulgarian NSDG)

Management objective: Specific management goals, practices, outcomes, and approaches established to achieve the requirements of this standard. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Management plan / planning documentation: The two words are used interchangeably in the Bulgarian standard. They mean the set of documents, reports, records, statements, maps, etc., which describe, justify and regulate the implementation of activities related to the *Management Unit**. In the context of Bulgaria this includes the Regional Development Plan for forest territories, forest management plan, as well as additional documentation related /developed to/ in connection with the management of the territory of the *Management Unit** and its certification. (The term *planning documentation** is often used in the indicators of the Bulgarian National Standard in spite of the FSC term “Management Plan”. The term “Planning documentation” was introduced by the BG NSDG in order to avoid confusion with the Bulgarian term “Forest management plan” which is something different from the FSC definition of “Management Plan”.) (Source: Definition developed by the Bulgarian NSDG)

Management Unit: A spatial area or areas submitted for FSC certification with clearly defined boundaries managed to a set of explicit long term management objectives which are expressed in a *management plan**. This area or areas include(s):

- all facilities and area(s) within or adjacent to this spatial area or areas under *legal** title or management control of, or operated by or on behalf of *The Organization**, for the purpose of contributing to the management objectives; and
- all facilities and area(s) outside, and not adjacent to this spatial area or areas and operated by or on behalf of *The Organization**, solely for the purpose of contributing to the management objectives. (Source: FSC-STD-01-001 V5-0).

Micro-habitat: Specific habitat of small size or limited distribution, which differs in nature from the surrounding larger habitat. Typical examples of micro-habitats in forest ecosystems are fallen trunks, damp places, rock formations, and others. (Source: Definition developed by the Bulgarian NSDG)

National laws: The whole suite of primary and secondary laws (acts, ordinances, statutes, decrees), which is applicable to a national territory, as well as secondary regulations, and tertiary administrative procedures (rules / requirements) that derive their authority directly and explicitly from these primary and secondary laws. (Source:FSC-STD-01-001 V5-0).

Native species: Species, subspecies, or lower taxon, occurring within its natural range (past or present) and dispersal potential (that is, within the range it occupies naturally or could occupy without

direct or indirect introduction or care by humans). (Source: Convention on Biological Diversity (CBD). Invasive Alien Species Programme. Glossary of Terms as provided on CBD website).

Natural conditions/native ecosystem: For the purposes of the Principles and Criteria and any applications of *restoration** techniques, terms such as 'more natural conditions', 'native ecosystem' provide for managing sites to favor or *restore** *native species** and associations of *native species** that are typical of the locality, and for managing these associations and other *environmental values** so that they form ecosystems typical of the locality. Further guidelines may be provided in FSC Forest Stewardship Standards (Source: FSC-STD-01-001 V5-0).

Natural forest: Forests, in which all or almost all trees are *native species**, which have many of the essential characteristics and key elements of natural forest* ecosystems, incl. wealth of *biodiversity**, soil characteristics and others. For the purposes of the national standard *forest cultures** classify as natural forests* when they are composed of *native species** within their natural range distribution and are managed through objectives and methods that are valid for the *natural forests** (see the definition for "forest cultures"). (Source: Definition developed by the Bulgarian NSDG)

Natural disturbances Events outside the natural cycle of failure of individual trees, that as a result from the action of natural abiotic and biotic factors alter the composition, structure and processes in forest ecosystems. Depending on the size of the territory affected by the disturbances and scale* / intensity of changes, natural disturbances are classified as small-area or large-area disturbances. Given the specific dynamics of the forest ecosystems in Bulgaria for the purposes of the national standard it is assumed that large-area are natural disturbances, in which the damage to the forest cover caused by abiotic factors (wind throw, snow falls, heavy snow, fire, avalanches and others) and/or pests* are concentrated (over 70% of the trees are affected) on an area greater than 1 hectare. (Source: Definition developed by the Bulgarian NSDG)

Natural hazards: Disturbances that can present risks to social and *environmental values** in the *Management Unit** but that may also comprise important *ecosystem functions**; examples include drought, flood, fire, landslide, storm, avalanche, etc. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Natural open fields: Natural and semi-natural habitats in forest areas where coverage with trees and shrubs is not bigger than 20% and can be defined as coastal sand dunes and inland dunes; shrub communities; natural and semi-natural grasslands; raised bogs, mires and bogs; rocky habitats and caves.

Note: To distinguish the following groups of ecosystems is used the classification of habitats of EUNIS. (Source: Definition developed by the Bulgarian NSDG)

Non-native species: See Alien species

Non-timber forest products (NTFP): All products other than timber derived from the Management Unit (Source: FSC-STD-01-001 V5-0).

Objective: The basic purpose laid down by *The Organization** for the forest enterprise, including the decision of policy and the choice of means for attaining the purpose (Source: Based on F.C. Osmaston. 1968. The Management of Forests. Hafner, New York; and D.R. Johnston, A.J. Grayson and R.T. Bradley. 1967. Forest Planning. Faber & Faber, London).

Obligatory code of practice: A manual or handbook or other source of technical instruction which The Organization must implement by law. Example of such a document is the Ethics Code of the state forest units in Bulgaria (Source: FSC-STD-01-001 V5-0; the term is complemented by the Bulgarian NSDG)

Occupational accident: An occurrence arising out of, or in the course of, work which results in fatal or non-fatal injury (Source: International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website).

Occupational disease: Any disease contracted as a result of an exposure to risk factors arising from work activity (Source: International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website).

Occupational injuries: Any personal injury, disease or death resulting from an occupational accident (Source: International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website).

Old-Growth Forests (OGF): Forests in the final phase of their development whose stands have reached a significant age and are not significantly influenced by large-area natural and anthropogenic disturbances. These are characterized by uneven spatial and age structure; presence of old living trees with diameters close to the maximum for the tree species and habitat; standing and fallen large dead trees in various stages of decomposition. In the absence of forests that have the characteristics of old growth forests within the Management Unit, the Organization shall identify forests with potential to become old-growth forests. These forests shall be managed in a way that leads to their transformation into old-growth forests. The transformation to old growth forests is gradual and to a great extent depends on the tree species, conditions of environment and initial structure of the stands. In order to reach the characteristics of old-growth forests the identified forests with potential shall be left to their natural dynamics. In those stands management activities are not allowed including extraction of wood, except in the cases of large-scale natural disturbances that cover over 30% of the area of the relevant old-growth forest. (Source: Definition developed by the Bulgarian NSDG)

Old-Growth Islands Parts of the managed stands that are left without sylvicultural intervention in order to maintain *biodiversity**, *conservation** of specific *habitats** *(micro habitats*)* and provide structural diversity on the stand level. (Source: Definition developed by the Bulgarian NSDG)

Organization: The person or entity holding or applying for certification and therefore responsible for demonstrating compliance with the requirements upon which FSC certification is based (Source: FSC-STD-01-001 V5-0).

Pesticide: Any substance or preparation prepared or used in protecting plants or wood or other plant products or human health or livestock or *biodiversity** from *pests**; in controlling *pests**; or in rendering such *pests** harmless. (This definition includes insecticides, rodenticides, acaricides, molluscicides, larvaecides, fungicides and herbicides) (Source: FSC-POL-30-001 FSC Pesticides Policy (2005).

Pests: Organisms that are harmful or considered as such in terms of business objectives. These may include animal pests, weeds, fungi and other microorganisms. (Source: FSC-STD-01-002_V1-0_EN_Glossary_of_Terms and FSC-POL-30-001)

Planning documentation: see Management plan

Plantations: Forested areas created through afforestation and / or planting of fast-growing domestic and exotic tree species. The main objective of management is intensive production of wood and / or wood products. In these forests short/fast rotations (young age of logging of the trees) are implemented. In the Bulgarian context the main difference between plantations and forest cultures is that in plantations short term rotations are planned and applied. Thus, they do not have and cannot gain the characteristics of a natural forest ecosystem. (Note: The original FSC term for Plantations is divided in two separate terms in the Bulgarian standard – Plantations and Forest cultures. In the text of Criteria 6.9 and 6.10 is kept only the word “Plantations”. Still, additional indicators are developed to include the term “forest culture” in the context of the Criteria) (Source: Definition developed by the Bulgarian NSDG)

Positive selection: Removing the direct competitors of desirable trees in the stand by applying a top method of thinnings with elements of the combined method. (Source: Definition developed by the Bulgarian NSDG)

Practical Guide for Identifying, Managing, and Monitoring High Conservation Value Forests in Bulgaria The document, also known as National HCVF toolkit was developed in 2004 by Bulgarian experts with the active assistance of ProForest and updated in the period 2014-2016. The concept of forests with high conservation* value (HCVF), which was established by FSC and integrated into the FSC standard for forest management to determine the key environmental and social values of forests and ensure their preservation or improvement through the application of rational management decisions and measures is used as a basis for the Toolkit (Source: Definition developed by the Bulgarian NSDG)

Precautionary approach: An approach requiring that when the available information indicates that *management activities** pose a threat of severe or irreversible damage to the environment or a threat to human welfare, The Organization* will take explicit and effective measures to prevent the damage and avoid the risks to welfare, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of *environmental values** are uncertain (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Based on Principle 15 of Rio Declaration on Environment and Development, 1992, and Wingspread Statement on the Precautionary Principle of the Wingspread Conference, 23–25 January 1998).

Pre-harvest [condition]: The diversity, composition, and structure of the forest* or culture/plantation prior to felling timber and appurtenant activities such as road building. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Principle: An essential rule or element; in FSC's case, of forest stewardship (Source: FSC-STD-01-001 V4-0).

Procedure: Specific way to perform an activity or process. Procedures can be documented or not. (Source: Definition developed by the Bulgarian NSDG)

Promptly: See definition for Timely manner.

Protected species: Species under Annex 3 of the Biological Diversity Act (Source: Definition developed by the Bulgarian NSDG)

Protection: See definition of Conservation.

Protection Area: See definition of Conservation Zone.

Publicly available: Information is easily and freely accessible to everyone. The way to provide access is consistent with the cultural characteristics and technical capabilities of the stakeholders.(Source: Definition developed by the Bulgarian NSDG)

Publicized: Information is made public in a manner ensuring continuous and free access by interested parties. For the needs of national FSC standard it is assumed that information is published if placed on a publicly accessible location (i.e. info board and / or the website of the Organization*) (Source: Definition developed by the Bulgarian NSDG)

Rare species: Species that are uncommon or scarce, but not classified as *threatened**. These species are located in geographically restricted areas or specific *habitats**, or are scantily scattered on a large scale. They are approximately equivalent to the IUCN (2001) category of Near Threatened (NT), including species that are close to qualifying for, or are likely to qualify for, a threatened category in the near future. (Source: Based on IUCN. (2001). IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN. Gland, Switzerland and Cambridge, UK).

Ratified: The process by which an international law, convention or agreement (including multilateral environmental agreement) is legally approved by a national legislature or equivalent legal* mechanism, such that the international law, convention or agreement becomes automatically part of national law or sets in motion the development of national law to give the same legal* effect (Source: FSCSTD-01-001 V5-0).

Reasonable (effort, measure, opportunities, etc.): Fair or appropriate to the circumstances or purposes, based on general experience (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; Shorter Oxford English Dictionary).

Refugia: An isolated area where extensive changes, typically due to changing climate or by disturbances such as those caused by humans, have not occurred and where plants and animals typical of a region may survive (Source: Glen Canyon Dam, Adaptive Management Program Glossary as provided on website of Glen Canyon Dam website)

Representative sample areas: Samples of the areas of natural *ecosystems** within the *Management Unit** that exist under natural environmental conditions and provide examples of the type of ecosystems with preserved structure and function. The samples include only ecosystems that are managed by the *Organization** and are included within the scope of the certificate. (Source: Definition developed by the Bulgarian NSDG; based on FSC IGIs Glossary FSC-STD-60-004 V1-0)

Resilience: The ability of a system to maintain key functions and processes in the face of stresses or pressures by either resisting or adapting to change. Resilience can be applied to both ecological systems and social systems. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; based on IUCN World Commission on Protected Areas (IUCN-WCPA). 2008. Establishing Marine Protected Area Networks – Making it Happen. Washington D.C.: IUCN-WCPA National Oceanic and Atmospheric Administration and The Nature Conservancy.).

Restore / Restoration: These words are used in different senses according to the context and in everyday speech. In some cases 'restore' means to repair the damage done to *environmental values** that resulted from *management activities** or other causes. In other cases 'restore' means the formation of more *natural conditions** in sites which have been heavily degraded or converted to other land uses. In the Principles and Criteria, the word 'restore' is not used to imply the recreation of any particular previous, pre-historic, pre-industrial or other pre-existing ecosystem.

The Organization* is not necessarily obliged to *restore** those *environmental values** that have been affected by factors beyond the control of The Organization, for example by natural disasters, by climate change, or by the legally authorized activities of third parties, such as public infrastructure, mining, hunting r settlement.

FSC-POL-20-003 The Excision of Areas from the Scope of Certification describes the processes by which such areas may be excised from the area certified, when appropriate. The Organization is also not obliged to *restore** *environmental values** that may have existed at some time in the historic or pre-historic past, or that have been negatively affected by previous owners or organizations. However, The Organization is expected to take *reasonable** measures to mitigate, control and prevent environmental degradation which is continuing in the Management Unit as a result of such previous impacts. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0 and FSC-STD-01-001 V5-0)

Restoration areas: In the Bulgarian context this term means *ecosystems** that have been identified according to Indicator 6.5.1 but for which *representative sample areas** are not available on the territory of the *Managament Unit** and the *Organization** has planned the *restoration** of such *ecosystems**. (Source: Definition developed by the Bulgarian NSDG)

Riparian zone: Interface between land and a water body, and the vegetation associated with it. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Riverbed: Riverbed is an element of relief on which temporary or permanent surface water flow is formed. It includes the *streambed** (lands that are flooded in the average water level) and flood plains

(which are flooded at high water). (Source: Definition developed by the Bulgarian NSDG; derived from Bulgarian Water Act)

Risk: The probability of an unacceptable negative impact arising from any activity in the Management Unit combined with its seriousness in terms of consequences (Source: FSC-STD-01-001 V5-0).

Scale: A measure of the extent to which a management activity or event affects an environmental value or a management unit, in time or space. An activity with a small or low spatial scale affects only a small proportion of the forest each year, an activity with a small or low temporal scale occurs only at long intervals. (Source: FSC-STD-01-001 V5-0).

Scale, intensity and risk: See individual definitions of the terms 'scale', 'intensity' and 'risk'.

Semi-natural habitats: Habitats, resulting from human activity in the past or maintained with specific activities that have characteristics of natural *habitats** in terms of *biodiversity** and interactions between species. This interaction between human activities (mainly traditional agriculture and livestock) and natural processes in ecosystems led to the creation of communities of flora and fauna with high *biodiversity** and *conservation** interest. (Source: Definition developed by the Bulgarian NSDG)

Significant: For the purposes of Principle 9, HCVs 1, 2 and 6 there are three main forms of recognizing significance.

- A designation, classification or recognized conservation status, assigned by an international agency such as IUCN or Birdlife International;
- A designation by national or regional authorities, or by a responsible national *conservation** organization, on the basis of its concentration of *biodiversity**;
- A voluntary recognition by the manager, owner or Organization, on the basis of available information, or of the known or suspected presence of a *significant** *biodiversity** concentration, even when not officially designated by other agencies.

Any one of these forms will justify designation as HCVs 1, 2 and 6. Many regions of the world have received recognition for their *biodiversity** importance, measured in many different ways. Existing maps and classifications of priority areas for *biodiversity** *conservation** play an essential role in identifying the potential presence of HCVs 1, 2 and 6(Source: FSC-STD-01-001 V5-0).

SLIMF FMUs* are those that comply with at least one of the following requirements:

- *FMUs** with an area of up to 1000 ha;
- The rate of harvesting is less than 20% of the mean annual increment (MAI)2 within the total production forest area of the unit and the annual harvest(for any one year) from the total production forest area is less than 5000 cubic meters
- The rate of harvesting is less than 20% of the mean annual increment (MAI)2 within the total production forest area of the unit and the average annual harvest from the total production forest is less than 5000 m3 / year during the period of validity of the certificate.

(Source: Definition developed by the Bulgarian NSDG based on FSC-STD-01-003 V1-0 SLIMF Eligibility Criteria)

Statutory law or statute law: The body of law contained in Acts of Parliament (national legislature) (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; based on Oxford Dictionary of Law).

Streambed: Lands that are flooded in the average water level of a river. (Source: Definition developed by the Bulgarian NSDG; derived from Bulgarian Water Act)

Sustainable use / Sustainable yield: Levels and frequency of use / yield, which will not lead to exhaustion and degradation of resources in the long term and will ensure the maintenance or enhancement of related *ecosystem services**. (Source: Definition developed by the Bulgarian NSDG)

Tenure: Socially defined agreements held by individuals or groups, recognized by legal statutes or customary practice, regarding the "bundle of rights and duties" of ownership, holding, access and/or usage of a particular land unit or the associated resources there within (such as individual trees, plant species, water, minerals, etc). In the Bulgarian context tenure includes also the right of ownership according to the Ownership Act. (Source: World Conservation Union (IUCN). Glossary definitions provided on IUCN website).

Threat: An indication or warning of impending or likely damage or negative impacts (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0; based on Oxford English Dictionary).

Threatened species: Species that meet the IUCN (2001) criteria for Vulnerable (VU), Endangered (EN) or Critically Endangered (CR) and are facing a high, very high or extremely high risk of extinction in the wild. In the context of Bulgaria in this definition include species listed in the Red Book of Bulgaria. (Source: Based on IUCN.(2001). IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN. Gland, Switzerland and Cambridge, UK.; this definition is completed by the Bulgarian NSDG to better meet national specifics).

Timber harvesting level: The actual harvest quantity executed on the Management Unit*, tracked by either volume (e.g. cubic meters) or area (e.g. hectares or decares) metrics for the purpose of comparison with calculated (maximum) allowable harvest levels. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Tranquility zones: Forest areas in which forestry activities are not conducted at all or if conducted they follows a predetermined time frame in order to provide conditions for breeding of certain species (Source: Definition developed by the Bulgarian NSDG)

Trees of the future: Vital trees of desirable tree species with high quality stems and crowns. They are expected to present high-quality assortments with certain parameters when they reach maturity. (Source: Definition developed by the Bulgarian NSDG)

Timely manner: As promptly as circumstances reasonably allow; not intentionally postponed by The Organization*; in compliance with applicable laws, contracts, licenses or invoices. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Uphold: To acknowledge, respect, sustain and support (Source: FSC-STD-01-001 V5-0).

Use rights: Rights for the use of resources of the Management Unit that can be defined by local custom, mutual agreements, or prescribed by other entities holding access rights. These rights may restrict the use of particular resources to specific levels of consumption or particular harvesting techniques (Source: FSC-STD-01-001 V5-0).

Verifiable targets: Specific goals, such as desired future forest conditions, established to measure progress towards the achievement of each of the management objectives*. These goals are expressed as clear outcomes, such that their attainment can be verified and it is possible to determine whether they have been accomplished or not. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Verifier: Potential source of information or evidence that allows an auditor to evaluate compliance with an indicator (Source: FSC).

Very Limited portion: The area affected shall* not exceed 0.5% of the area of the Management Unit* in any one year, nor affect a total of more than 5% of the area of the Management Unit* (Source: based on FSC-STD-01-002 V1-0 FSC Glossary of Terms (2009)).

Waste materials / waste: unusable or unwanted substances or by-products, such as:

- Hazardous waste, including chemical waste and batteries;
- Containers;
- Motor and other fuels and oils;
- Rubbish including metals, plastics and paper; and
- Abandoned buildings, machinery and equipment.

(Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Water bodies (including water courses): Seasonal, temporary, and permanent brooks, creeks, streams, rivers, ponds, and lakes. Water bodies include riparian or wetland systems, lakes, swamps, bogs and springs. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0)

Wetlands: Transitional areas between terrestrial and aquatic systems in which the water table is usually at or near the surface or the land is covered by shallow water Under the Ramsar Convention, wetlands can include tidal mudflats, natural ponds, marshes, potholes, wet meadows, bogs, peatlands, freshwater swamps, mangroves, lakes, rivers and even some coral reefs. (Source: FSC IGIs Glossary FSC-STD-60-004 V1-0, based on Cowarding, L.M., Carter, V., Golet, F.C., Laroe, E.T. 1979. Classification of Wetlands and Deepwater Habitats of the United States. DC US Department: Washington).

Worker: (meaning aslo the words: employee/s, personnel, staff, etc.) Any person who is employed by an employer as well as any person who works for himself, including trainees or practitioners during the training, probation and practice. (Source: Definition developed by the Bulgarian NSDG)