

Russian FSC National Initiative

RUSSIAN NATIONAL FOREST STEWARDSHIP COUNCIL STANDARD

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Russian National FSC Standard

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INTRODUCTION

FSC Principles and Criteria for Forest Stewardship (2002) are an internationally recognized standard for responsible forest management. However, any international standard shall be adapted to national or regional conditions by taking into account various legal, social, and geographic conditions in which forests of different parts of the world exist. In practice, it means that it is necessary to develop, in addition to *FSC Principles and Criteria for Forest Stewardship*, special indicators with a set of measurable means of verification to evaluate forests at a level of management unit. The FSC standard of forest stewardship can be developed for the country as a whole or for its parts (regions).

Principles and Criteria for Forest Stewardship along with a set of special indicators and rules on the implementation make up a FSC standard of forest stewardship.

The Standard shall be accredited by the Forest Stewardship Council. To be accredited by FSC such a standard shall be developed in accordance with the procedures specified in FSC-STD-60-006 *Process for Developing FSC Forest Stewardship Standards*. The structure and content of such standard shall meet the requirements of FSC specified in FSC-STD-01-001 V4-0 EN *FSC Principles and Criteria for Forest Stewardship* (2002) and FSC-STD-20-002 (Version 1-0) *Structure and Content of Forest Stewardship Standards* (2004).

The Russian National Standard has been developed by the National Working Group on Voluntary Forest Certification in the 1999—2007. In 2006, FSC International endorsed the Coordinating Council of the National Working Group as the Russian National FSC Initiative. According to Russian legal requirements, the Russian National FSC Initiative's legal entity is registered in the name non-profit Regional Non-governmental Organization *Society for Assisting Development of Natural Voluntary Forest Certification*. The Russian National FSC Initiative consists of nine members representing economic, environmental, and social chambers, which are elected by the National Working Group.

The decision to develop the standard has been taken by the 2nd (Constituent) Conference of the National Working Group on Voluntary Forest Certification in Krasnoyarsk, 1999. In particular, the need to develop a national standard was prescribed by the Statutes of the National Working Group on Voluntary Forest Certification and the Program of the National Group and Coordinating Board. The Technical Committee of the National Group has been established to develop national interpretation of principles and criteria and other regulations. The Coordinating Board was entrusted with responsibility for coordinating the standard development.

The first version of the checklist in the FSC format was developed in 2000 based on Document 1.2 *FSC Principles and Criteria for Forest Stewardship* (version of January 1999) and *Position of Non-Governmental Organizations on Key Criteria for Sustainable Forest Stewardship in Russia* adopted by the meeting of NGOs held in Pushkino, Moscow Oblast, July 11 2000.

The second version of the checklist was developed in 2001 after a broad consultative process with experts. At the same time, the decision on field testing of the standard was taken.

In early 2002, the third draft of the checklist was prepared, based on the recommendations provided by the GFA-Terra Systems certification company during the field test in Klinskiy Leskhoz (Moscow Oblast), and on comments of the FSC Secretariat. The draft checklist has been discussed and adopted at the meeting of the Coordinating Board of the National Group held in Krasnoyarsk in March 2002.

GFA-Terra Systems conducted the second and third field tests of the checklist at the Lesosibirsk Sawmill No. 1, Krasnoyarsk Kray, May 2002 and the Terneyles Company, Primorskiy Kray, October 2002. Based on the outputs of the field testing, the fourth and fifth version of the checklist have been drafted. A number of Russian forest experts and auditors of GFA-Terra Systems took part in the field testing. During the development of the standard, positions and opinions of regional working groups on forest certification have been taken into account.

The Coordinating Board of the National Group held in Moscow, November 1 2002, elaborated and assumed as a basis the checklist (version 6). The decision about Principles 1–8 and 10 was adopted by consensus, while Principle 9 was adopted by voting. It was decided to continue consultation to reach consensus on the Principle 9.

In October 2003, the National Working Group on Voluntary Forest Certification developed Standard *Forest Management. Classification and Nomenclature of Attributes. Evaluation Procedure. Standard of Non-governmental Organization. Draft Final Version. Version 1* based on the checklist (version 6).

The work of a special working group and discussions at the meeting of the Coordinating Board on October 17 2003 resulted in the adoption of the new version of the Principle 9 by consensus. The draft checklist (version of December 16 2004) was approved. The respective changes have been made to the Draft National Framework Standard *Forest Management. Classification and Nomenclature of Attributes. Evaluation Procedure. Standard of Non-governmental Organization. Draft Final Version. Version 1*.

Since the Forest Stewardship Council has adopted the new content and structure for developing FSC standards – FSC-STD-20-002 (Version 1-0) *Structure and Content of Forest Stewardship Standards* (2004), the Coordinating Board developed the second version of the *Russian National Framework Forest Stewardship Council Standard. Forest Management Standard of Non-governmental Organization. Version 2*. This version of the standard was adopted in general at the Conference of the National Working Group, May 26–27 2005, Zvenigorod, Moscow Oblast. After taking into consideration comments and remarks, this version has been finalized (Version 3) and after discussion adopted by the Russian National FSC Initiative (the new name for the Coordinating Council of the National Working Group after the endorsement by FSC International in 2006) in January 29 2007 (Version 4). This version of the Russian National FSC Standard took into account conclusions from the project aimed at harmonization of FSC forest management standards in the Baltic region in the 2005–2006. The participants of this project were National FSC Initiatives from Sweden, Germany, Finland, Estonia, Latvia, Denmark, Poland and Russia. The following FSC accredited standards were considered during the harmonization process: Sweden, Germany, Finland and Denmark. The project results were published (*FSC – Breaking the Borders. FSC-certification and Harmonization of Standards in the Baltic Region*, 2006). The Russian National FSC Standard was finalized also with account for the National Boreal Standard of Canada (accredited by FSC as of August 6 2004) – the extensive region being most similar in natural conditions to Russia.

FSC accreditation body (FSC ASI) has evaluated the technical and procedural requirements for the development of Russian National Framework Forest Stewardship Council Standard and their compliance with FSC technical and procedural requirements (ABU-REP-31-RU-2007-06-26, July 27 2007). FSC ASI as part of the accreditation process for the Russian National FSC Standard raised 3 preconditions, 9 conditions and 6 recommendations. In order to be endorsed by FSC the National Initiative will need to demonstrate compliance with all preconditions by January 01 2008, while conditions shall be closed during 12 months after accreditation of the standard (xx.xx.2008). Information on the procedure for finalizing the standard and comments from FSC ASI were delivered to 150 addresses, including members of the Russian National FSC Initiative, regional working groups, FSC certified companies, certification bodies and other interested parties on September 14 2007. The special working group at the Coordination Council considered all received comments and prepared the final draft, which was once again made public sent out to all stakeholders November 23 2007. The Russian National Initiative approved the final version of the Russian National Standard (version 5.0) 25 December 2007. FSC International endorsed this version of the standard xx.xx.2008. Some conditions and recommendations raised by FSC ASI will be considered in the standard during the specified time and will be submitted for endorsement by FSC International.

The Coordinating Council of the Russian National FSC Initiative during the accreditation period of this standard will regularly assess its quality to develop proposals on its revision. The full scale revision of the standard will be completed at the latest 6 months before the date of expiry of the standard (i.e. xx.xx.20xx). During the revision period the Coordinating Council will collect proposals and comments from members of national and regional working groups, certificate holders, FSC members and other interested parties. All collected information will be considered by the Coordinating Council and taken into account in the revised version of the standard according to the approved procedure.

Russian National FSC Standard

The standard specifies nationwide requirements to forest management; establishes general rules for regional forest stewardship standards; and serves for certification of forest management in accordance with FSC procedures.

The standard is applicable to forest management units, forest enterprises, organizations, FSC certification companies and developers of FSC regional standards.

PART 1. STRUCTURE AND CONTENT

1. Specification of Scope

1.1. The Russian National FSC Standard (hereinafter the National Standard) is applicable to the Russian Federation as a whole.

1.2. The National Standard specifies nationwide requirements to forest management, including the content of regional standards of forest stewardship, in accordance with the FSC requirements.

1.3. FSC regional standards (hereinafter regional standards) can be developed within the frameworks established by the National Standard for particular regions of Russia (administrative regions or their groups). These regional standards will contain more detailed requirements to forest management by taking into account regional features.

1.4. Regional standards shall be harmonized with the National Standard and regional standards of adjacent regions.

1.5. Regional standards come into effect after harmonization with the National Standard and accreditation in accordance with the FSC procedures.

1.6. In the case a forest management unit that seeks FSC certification is located in an area which has an effective regional standard the latter shall be used for assessing the forest management.

1.7. If a forest management unit that seeks FSC certification is located in an area, which does not have a regional standard, the National Standard shall be used to assess the forest management, although taking into account relevant regional administrative regulations.

2. Standard Hierarchical Framework

2.1. The National Standard is structured as a hierarchy of the FSC Principles, FSC Criteria and the associated indicators and means of verification in compliance with FSC-STD-01-001 V4-0 EN *FSC Principles and Criteria for Forest Stewardship* (2002). The compliance with the National Standard shall be determined by evaluating observed performance at the forest management unit level against each indicator of the National Standard, and in comparison with any given performance threshold(s) or outcomes specified for indicator.

3. Content

3.1. The National Standard includes the wording of each FSC Principle and each FSC Criterion in the same order as they occur in FSC-STD-01-001 V4-0 EN *FSC Principles and Criteria for Forest Stewardship* (2002).

As the basis, we used the translation of FSC Principles and Criteria for Forest Stewardship made by the FSC National Working Group on Voluntary Forest Certification (under development) in 1999 (*FSC Principles and Criteria, Document 1.2*. In: *Materials of the Forest Stewardship Council, part 1*, National Working Group on Voluntary Forest Certification, Moscow, 1999). Found inaccuracies have been corrected and the changes made to the authentic FSC standard by that moment have been incorporated.

3.2. The National Standard does not use any additional criteria which are not part of the FSC-STD-01-001 V4-0 EN *FSC Principles and Criteria for Forest Stewardship* (2002).

4. Scale and Intensity of Forest Management

4.1. Nowadays, there are no small private forest owners involved in forestry in Russia due to lack of private forest ownership.

Small forest areas (several hundreds of hectares) are quite rarely given into lease and only for short term. Owing to the complicated administrative procedure and forest laws, long-term lease of such small areas is economically unprofitable and it does not permit inexhaustible use of forest resource.

Due to unclear legal tools and procedures and low current demand for services and products of low intensity forest management enterprises, there is no economically successful practice of such enterprises.

In addition, the new version of the Forest Code, which came into action in 2007, required serious re-working of the forestry regulations, which is still underway.

4.2. Therefore, the Russian National Standard does not contain any specific requirements or exclusions for small and low intensity forest management enterprises (SLIMF).

5. Numbering

5.1. The numbering of the FSC Principles and Criteria within the standard is the same as FSC-STD-01-001 V4-0 EN *FSC Principles and Criteria for Forest Stewardship*, 2002.

5.2. The numbering of all indicators begins with the number of a respective FSC criterion for which the number of an indicator follows one after another. For example, the first indicator for Criterion 5.3 is 5.3.1, the second 5.3.2, etc.

6. Translation

6.1. The National Standard was initially developed in Russian. However, for accreditation by FSC the Standard has been submitted in English. Therefore, the English version of the accredited National Standard is considered definitive in the case of any dispute. Only the accredited English version of the National Standard can be officially implemented in the field to ensure forest managers compliance with FSC-STD-01-001 V4-0 EN *FSC Principles and Criteria for Forest Stewardship* (2002).

7. Standard Effective Date

7.1. The National Standard was officially accredited by the Forest Stewardship Council on xx.xx.20xx.

7.2. The period of validity of the National Standard is 5 years.

7.3. The 'standard effective' date is 12 months after the date on which the standard is accredited by FSC, i.e. xx.xx.20xx.

7.4. However, the National Standard shall be used by certification bodies for all evaluations in Russia after the date of its accreditation.

7.5. Existing certificate holders shall be required to be in compliance with the National Standard by the 'standard effective' date, in order to hold an FSC certificate. This allows for a period of up to 12 months from the date of standard accreditation for existing certificate holders to come into compliance with the new requirements.

7.6. After the standard effective date the certification body shall require any non-compliance that is identified to be corrected in accordance with the normal requirements for major or minor non-compliances, as applicable.

PART 2. NOTES

8. Certification Decision Making

8.1. Certification bodies shall make certification decisions based on their evaluation of the forest management enterprise's compliance with each indicator specified in the National Standard.

8.2. All non-compliances of all indicators that are identified by the certification body during an evaluation shall be recorded in the evaluation report or associated checklists.

8.3. Each non-compliance shall be evaluated to determine whether it constitutes a major or minor non-compliance at the level of the associated FSC criterion.

8.3.1. A non-compliance may be considered minor if:

- it is a temporary lapse, or
- it is unusual / non-systematic, or
- the impacts of the non-compliance are limited in their temporal and spatial scale, and
- prompt corrective action has been taken to ensure that it will not be repeated, and
- it does not result in a fundamental failure to achieve the objective of the relevant FSC criterion.

8.3.2. A non-compliance shall be considered major if, either alone or in combination with further non-compliances of other indicators, it results in, or is likely to result in a fundamental failure to achieve the objectives of the relevant FSC criterion either in the forest management unit(s) within the scale of evaluation.

8.3.3. Such fundamental failure shall be indicated by with non-compliance(s), which:

- continue over a long period of time, or
- are repeated or systematic¹, or
- affect a wide area, or
- are not corrected or adequately responded by the forest managers once they have been identified.

Notes: Action(s) taken to correct a non-compliance may continue over a period of time (normally up to 1 (one) year, but in exceptional circumstances up to 2 (two) years). The certification body shall determine whether such action is considered adequate.

8.4. The certification body shall consider the impact of a non-compliance, taking account of the fragility and uniqueness of the forest resource, when evaluating whether a non-compliance results in or is likely to result in a fundamental failure to achieve the objective of the relevant FSC criterion.

8.5. The certification body shall not issue or re-issue a certificate to a supplier if there is a major non-compliance with the requirements of the National Standard.

Notes: If corrective action is taken in respect of a major non-compliance, such that the non-compliance no longer fundamentally prejudices achievement of the objective of the relevant FSC criterion, the major non-compliance may be downgraded to a "minor non-compliance" and a certificate may then be issued or re-issued.

8.6. The certification body shall suspend or withdraw a certificate if a major non-compliance is identified after the certificate has been issued, and the certificate holder does not correct the non-compliance within 3 (three) months (or, in exceptional circumstances, 6 (six) months) of the non-compliance being identified.

Note: Action(s) taken to correct a major non-compliance may continue over a period of which is longer than 3 months. However, action must be taken within the specified period which is sufficient to prevent new instances of non-compliance within the scope of the certification.

¹ The certification body shall determine whether the number and impact of a series of minor non-compliances identified during sampling is sufficient to demonstrate "systematic" failure (i.e. failure of management systems). If this is the case then the repeated instances of minor non-compliances shall constitute a major non-compliance.

9. Re-structuring the Standard for Use in the Forest

9.1. The FSC-accredited National Standard may be re-structured by the certification body or the FSC National Initiative in order to facilitate implementation in the forest, or to make the standard easier for stakeholders to understand.

9.2. Restructuring of the National Standard shall have no effect on the requirements for compliance or decision making, and in the event of a complaint or appeal the complete standard, as approved by the FSC Board, shall be considered definitive.

PART 3. CHECKLIST FOR COMPLIANCE WITH THE RUSSIAN FSC STANDARD

PRINCIPLE 1: COMPLIANCE WITH LAWS AND FSC PRINCIPLES

Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria

<i>Criteria 1.1. Forest management shall respect all national and local laws and administrative requirements</i>	
Indicators	Means of verification
1.1.1. The enterprise is established or re-registered as prescribed by law	1.1.1.1. Founding documents. 1.1.1.2. Interviews with enterprise managers
1.1.2. Enterprise's <i>forest management</i> activities are in compliance with laws	1.1.2.1. Documentation (including protocols of governmental inspections); protocols of found violations of environmental, forest and water legislation, charges and fees addressed to enterprise and reports. 1.1.2.2. Interviews with staff ² . 1.1.2.3. Interviews with local communities ³ . 1.1.2.4. Field inspection
1.1.3. The enterprise keeps up-to-date its legislative database	1.1.3.1. Electronic collection of laws and regulations and/or subscription to official federal and regional periodicals containing such documents. 1.1.3.2. Interviews with enterprise managers
1.1.4. The enterprise staff are informed of changes in legislation relevant to enterprise's activity	1.1.4.1. Evidence of informing the staff on relevant changes in the legislation and administrative regulations
<i>Criteria 1.2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid</i>	
Indicators	Means of verification
1.2.1. The enterprise maintains a list of all applicable and prescribed fees, royalties, taxes, and other charges to be paid with their due	1.2.1.1. List of fees, royalties, taxes, and other charges. 1.2.1.2. Accounting reports. 1.2.1.3. Interviews with enterprise managers. 1.2.1.4. Interview with accountant
1.2.2. The enterprise pays all applicable and prescribed fees, royalties, taxes, and other charges as required and promptly	1.2.2.1. List of fees, royalties, taxes, and other charges. 1.2.2.2. Accounting reports. 1.2.2.3. Interviews with accountant. 1.2.2.4. Tax inspector's confirmation of receipt
1.2.3. The enterprise pays all wages and salaries prescribed by laws, regulations, forestry tariff agreements, collective, and work agreements to the staff fully and promptly	1.2.3.1. List of relevant payments to the staff. 1.2.3.2. Accounting reports. 1.2.3.3. Interview with enterprise accountant. 1.2.3.4. Interviews with staff

² Hereinafter the staff shall be interpreted, when it is relevant, as forest workers and other staff of the applicant, subcontractors and their staff and other sub-licensees working in the area under certification.

³ Hereinafter when interviewing local communities it is necessary to also approach their major informal groups and NGOs (e.g. councils of veterans), not just local authorities (elder, the head of territorial public government ("samoupravlenie") etc.).

Criteria 1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected	
Indicators	Means of verification
<p>1.3.1. Staff are aware about the content of the conventions of International Labour Organization (as well as <i>Safety and Health in Forestry Work: An ILO Code of Practice</i>, 1998), CITES, <i>Convention on Biological Diversity</i>, <i>Ramsar Convention</i>, <i>Convention for the Protection of the World Cultural and Natural Heritage</i> as well as bilateral nature conservation agreements ratified by Russia.</p> <p>Note: see <i>Annexes B</i> and <i>C</i></p>	<p>1.3.1.1. Availability of the conventions and relevant agreements ratified by Russia for staff. 1.3.1.2. Administrative orders by the enterprise to make the staff aware about the relevant conventions and the accessibility of the latter to the staff. 1.3.1.3. Records of awareness activities (programs and lists of participants). 1.3.1.4. Interviews with staff</p>
<p>1.3.2. During <i>forest management</i> the provisions of the international conventions and agreements ratified by Russia that are relevant to enterprise's activity are being observed</p>	<p>1.3.2.1. Measures to meet the requirements of the relevant conventions and agreements. 1.3.2.2. Lesokhozyaystvenny reglament (forest inventory materials), proekt osvoyeniya lesov (forest management plan) and/or other documents. 1.3.2.3. Interviews with enterprise managers. 1.3.2.4. Interviews with staff</p>
<p>1.3.3. The enterprise does not use forced labor</p>	<p>1.3.3.1. Interviews with personnel managers. 1.3.3.2. Interviews with staff</p>
<p>1.3.4. The enterprise does not employ foreigners, which are not registered in compliance with the law</p>	<p>1.3.4.1. Interviews with personnel managers. 1.3.4.2. Interviews with staff</p>
<p>1.3.5. The enterprise does not employ people without citizenship</p>	<p>1.3.5.1. Interviews with personnel managers. 1.3.5.2. Interviews with staff</p>
Criteria 1.4. Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties	
Indicators	Means of verification
<p>1.4.1. The enterprise has a list of conflicts between compliances with national laws and/or administrative regulations and compliance with FSC Principles and Criteria</p>	<p>1.4.1.1. List and descriptions of non-compliances</p>
<p>1.4.2. All negotiations and consultations of enterprise managers with relevant regulatory bodies, <i>stakeholders</i>⁴, FSC and the <i>certification</i> body to resolve the conflicts identified in consistence with 1.4.1 are documented</p>	<p>1.4.2.1. Evidence of correspondence, protocols of meetings on conflict resolution. 1.4.2.2. Internal procedures for resolution of identified conflicts between the legislation and FSC Principles and Criteria. 1.4.2.3. Interviews with stakeholders</p>

⁴ Hereinafter all terms and notions shown in *italic* are described in Annex G. Glossary.

1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities	
Indicators	Means of verification
<p>1.5.1. There is a system of measures to reveal, document and prevent illegal harvesting, illegal seizure of land, illegal construction, and other illegal and unauthorized activities within the forest area being certified.</p> <p>Note: If applicable, the enterprise and auditor shall use materials of the remote sensing monitoring of the forest use within the <i>forest land</i> performed by the Federal Forestry Agency. Results of the monitoring are available from relevant regional authorities</p>	<p>1.5.1.1. System of measures for revealing, documenting and preventing illegal and unauthorized activities.</p> <p>1.5.1.2. Register of records of illegal and unauthorized activities, including remote sensing monitoring.</p> <p>1.5.1.3. Interviews with enterprise managers.</p> <p>1.5.1.4. Interviews with local authorities.</p> <p>1.5.1.5. Interviews with relevant enforcement agencies at the federal, regional, and district levels.</p> <p>1.5.1.6. Interviews with stakeholders.</p> <p>1.5.1.7. Field inspection</p>
<p>1.5.2. The enterprise jointly with the relevant agencies implements measures consistent with 1.5.1.</p> <p>Note: If enforcement agencies failed to undertake the required measures, the enterprise shall demonstrate that the enforcement agency was informed about the problem, while the enterprise is doing all possible to solve these problems falling within its competence</p>	<p>1.5.2.1. List of users with rights to manage or to use the resources within the forest being certified.</p> <p>1.5.2.2. System of measures for revealing, documenting and preventing illegal and unauthorized activities.</p> <p>1.5.2.3. Register of records of illegal and unauthorized activities.</p> <p>1.5.2.4. Evidence of inspections by relevant enforcement agencies.</p> <p>1.5.2.5. Interviews with relevant enforcement agencies at the federal, regional, and district levels.</p> <p>1.5.2.6. Interviews with stakeholders.</p> <p>1.5.2.7. Field inspection</p>
<p>1.5.3. There are no incidents of unauthorized <i>forest land</i> seizure and construction</p>	<p>1.5.3.1. Forest inventory materials.</p> <p>1.5.3.2. Legality certificates of land allotment.</p> <p>1.5.3.3. Interviews with enterprise specialists.</p> <p>1.5.3.4. Interviews with local communities</p>

Criteria 1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria	
Indicators	Means of verification
<p>1.6.1. The applicant for <i>certification</i> shall make a full disclosure of all forest areas over which the applicant has some responsibility, whether as owner (its authorized representative) or user (leaseholder, subleaseholder, contractor, including timber sale ones) to a certification body.</p> <p>Note: Applicant for <i>certification</i> could be a large company, which seeks <i>certification</i> only for part of forest areas in which the applicant is involved whether as owner, manager or user</p>	<p>1.6.1.1. A list of forest areas (leases, forest management units (lesnichestvo) over which the applicant has some responsibility.</p> <p>1.6.1.2. Interview with stakeholders</p>
<p>1.6.2. When <i>certification</i> does not include all the forest areas in which the applicant is involved in accordance to 1.6.1, the applicant shall document the reasons for that.</p> <p>Note: Thus, the application for <i>certification</i> may not include forest areas in applicant's ownership, lease or management located in other countries or subjects of the Russian Federation if they are managed independently. More details see FSC Policy <i>FSC-POL-20-002 (2000) EN Partial Certification of Large Ownerships</i></p>	<p>1.6.2.1. Evidence of compliance to the FSC Policy <i>FSC-POL-20-002 (2000) EN</i>.</p> <p>1.6.2.2. A list of all forest areas (leases, forest management units (lesnichestvo) over which the applicant has some responsibility.</p> <p>1.6.2.3. A written explanation for the reasons for seeking partial certification of large ownerships.</p> <p>1.6.2.4. Plans for further FSC certification, other written document justifying enterprise's decision to seek partial certification.</p> <p>1.6.2.5. Interview with enterprise managers</p>
<p>1.6.3. A written statement of long-term commitment to adhere to the Russian National FSC Standard is available</p>	<p>1.6.3.1. Written documents approved by enterprise managers (socio-ecological policy or its main provisions, operating guidelines etc.).</p> <p>1.6.3.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan)</p>
<p>1.6.4. The applicant for <i>certification</i> demonstrates a long-term commitment to adhere to the Russian National FSC Standard at all areas consistent with 1.6.1.</p> <p>Note: FSC members and applicants for FSC membership shall formally commit themselves to doing everything possible to achieve <i>certification</i> of all forests they manage within the reasonable time frame (normally this will not exceed 2 years) (see FSC Policy <i>FSC-POL-20-002 (2000) EN Partial Certification of Large Ownerships</i>). Other categories of applicants shall at least demonstrate that the stewardship of the <i>forest lands</i> not covered by the <i>certificate</i> does not compromise the FSC's reputation, does not destroy trust to it and is not associated with illegal harvesting or associated trade, destruction of <i>HCVF</i>, violation of traditional and civil rights and planting of genetically modified trees and conversion of natural forests to <i>plantations</i></p>	<p>1.6.4.1. Evidence of compliance to the FSC Policy <i>FSC-POL-20-002 (2000) EN</i>.</p> <p>1.6.4.2. A list of all forest areas (leases, forest management units (lesnichestvo) over which the applicant has some responsibility.</p> <p>1.6.4.3. Plans for FSC certification approved by applicant managers.</p> <p>1.6.4.4. Interview with stakeholders.</p> <p>1.6.4.5. Interview with applicant managers</p>

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<p>1.6.5. When excluding (excising) areas from the scope of <i>certification</i>, requirements of FSC Policy <i>FSC-POL-20-003 (2004) EN The Excision of Areas from the Scope of Certification</i> is followed.</p> <p>Note: This in first turn applies to international FSC requirements with respect to the excision of areas from the scope of <i>certification</i> (item 2.2) and management of factors beyond the control of the forest managers (item 3.1)</p>	<p>1.6.5.1. Evidence of compliance to the FSC Policy <i>FSC-POL-20-003 (2004) EN</i>.</p> <p>1.6.5.2. Maps of all areas excised from the scope of certification.</p> <p>1.6.5.3. A set of management operations for these areas in lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>1.6.5.4. Interview with enterprise managers</p>
<p>1.6.6. The requirements of the Russian National FSC Standard are being explained to staff</p>	<p>1.6.6.1. Evidence of employee education and awareness training to the Russian National FSC Standard (administrative orders on training courses, training programs, lists of participants).</p> <p>1.6.6.2. Availability of the Russian National FSC Standard to staff as information packages.</p> <p>1.6.6.3. Interviews with enterprise managers</p> <p>1.6.6.4. Interviews with staff</p>

PRINCIPLE 2: TENURE AND USE RIGHTS AND RESPONSIBILITIES

Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established

Criteria 2.1. Clear evidence of long-term use rights to the land (e.g. land title, customary rights, or lease agreements) shall be demonstrated	
Indicators	Means of verification
2.1.1. Documents confirming rights to own the <i>forest lands</i> and to manage or lease forest resources at least for five years upon the issue of <i>certificate</i> shall be in place	2.1.1.1. Certificate of state registration of lease agreement for forest land. 2.1.1.2. Documents confirming forest ownership or management rights
2.1.2. The boundaries of the area are marked on maps and can be identified on site	2.1.2.1. Maps with marked borders of the area. 2.1.2.2. Field inspection
Criteria 2.2. Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies	
Indicators	Means of verification
2.2.1. <i>Local communities</i> with <i>legal</i> or <i>customary</i> (including <i>traditional</i>) rights to use forest resources are identified	2.2.1.1. List of local communities. 2.2.1.2. Maps. 2.2.1.3. Interviews with enterprise managers. 2.2.1.4. Interviews with local administration. 2.2.1.5. Interviews with local communities
2.2.2. The enterprise does not restrict access of people to forest, except during periods of high fire danger and emergency situations. Note: According to the Forest Code's Art. 11 all people have right to stay in forest freely and free of charge	2.2.2.1. Operating instructions and rules of behavior during periods of high fire danger and emergency situations. 2.2.2.2. Enterprise's administrative orders. 2.2.2.3. Interviews with enterprise managers. 2.2.2.4. Interviews with local authorities 2.2.2.5. Interviews with local communities
2.2.3. The enterprise does not violate <i>legal</i> or <i>customary</i> (including <i>traditional</i>) tenure or use rights of <i>local communities</i> to the forest resources when managing the forest. Note: According to the Forest Code's Art. 11 people have right to harvest and collect for their own needs wild-growing fruits, berries, nuts, mushrooms, and other edible forest resources (forest food resources), as well as non-timber forest products	2.2.3.1. The availability of administrative regulations with regard to these types of the use of forest resources. 2.2.3.2. The absence of grievances of local people regarding violation of their right during forest management. 2.2.3.3. Documents on protective forests ⁵ and special protection forest habitats ⁶ (OZU) around settlements (forest inventory materials) and areas traditionally used by local people. 2.2.3.4. Interviews with enterprise managers. 2.2.3.5. Interviews with local authorities. 2.2.3.6. Interviews with local communities

⁵ Hereinafter categories of *protective forests* (former 1st Group Forests) with management restrictions.

⁶ Hereinafter forest habitats with management restrictions being established in *protective*, *exploitable* and *reserve* forests, abbreviated *OZU*.

Criteria 2.3. Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified	
Indicators	Means of verification
2.3.1. The enterprise has a documented procedure for resolution of disputes over tenure claims (lease) and use rights to the forest resources	2.3.1.1. A written procedure for dispute resolution. 2.3.1.2. Interviews with enterprise managers. 2.3.1.3. Interviews with local authorities. 2.3.1.4. Interviews with local communities
2.3.2. Disputes and grievances consistent with 2.3.1 are resolved through communication, negotiation or mediation. Legal procedures are used only if negotiations fail	2.3.2.1. A written procedure for dispute resolution. 2.3.2.2. Register of disputes and grievances. 2.3.2.3. Protocols of dispute resolution commission meetings, other information of agreements reached. 2.3.2.4. Evidence that disputants follow the agreements reached. 2.3.2.5. Interviews with district level forest management administration and/or relevant enforcement authorities. 2.3.2.6. Interviews with enterprise managers. 2.3.2.7. Interviews with local authorities. 2.3.2.8. Interviews with local communities
2.3.3. The enterprise maintains a record of all disputes and grievances consistent with 2.3.1 and of the status of their resolution	2.3.3.1. A written procedure for dispute resolution. 2.3.3.2. Register of disputes and grievances. 2.3.3.3. Interviews with district level forest management administration and/or relevant enforcement authorities. 2.3.3.4. Interviews with enterprise managers. 2.3.3.5. Interviews with local authorities. 2.3.3.6. Interviews with local communities
2.3.4. There are no <i>outstanding disputes of substantial magnitude involving different interests</i>	2.3.4.1. Interviews with district level forest management administration and/or relevant enforcement authorities. 2.3.4.2. Interviews with local authorities. 2.3.4.3. Interviews with local communities

PRINCIPLE 3: INDIGENOUS PEOPLES' RIGHTS

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

Criteria 3.1. Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies	
Indicators	Means of verification
3.1.1. All <i>indigenous peoples</i> ⁷ practicing <i>traditional use of natural resources</i> within the forest area being certified and having declared themselves as such are determined	3.1.1.1. List of ethno-cultural indigenous groups and communities. 3.1.1.2. Documents and interviews with ethnologists and/or regional history experts confirming the tenure or use rights of indigenous peoples to the forest resources. 3.1.1.3. Interviews with enterprise managers. 3.1.1.4. Interviews with staff of local education and cultural institutions. 3.1.1.5. Interviews with local authorities. 3.1.1.6. Interviews with regional and local indigenous organizations and local communities
3.1.2. <i>Indigenous peoples</i> have access to information regarding the condition and use of forest resources within the forest area being certified (except <i>confidential information</i>), in particular, concession borders, planned <i>forest management</i> activities, including timber harvesting, <i>silvicultural operations</i> , and road construction. Note: The procedure of consultations with <i>indigenous peoples</i> and consideration of their concerns (3.1.2–3.1.4) also applies to <i>local communities</i>	3.1.2.1. Availability of the planned forest management activities to indigenous people. 3.1.2.2. Interviews with enterprise managers. 3.1.2.3. Interviews with local authorities. 3.1.2.4. Interviews with regional and local indigenous organizations and local communities
3.1.3. Forest area has been given into lease in open manner	3.1.3.1. Availability of publications about the forest lease auctions. 3.1.3.2. Interviews with district level forest management administration
3.1.4. <i>Indigenous peoples</i> have been informed about giving the forest area into lease (e.g. through public hearings)	3.1.4.1. Publications about the forest lease auctions. 3.1.4.2. Protocols of public hearings (if applicable), formal community wide gatherings of residents (skhod), other meetings etc. 3.1.4.3. Interviews with local authorities. 3.1.4.4. Interviews with regional and local indigenous organizations and communities

⁷ Hereinafter *indigenous peoples* mean *indigenous people's communities (obshchiny)*. The interpretation of the notion *indigenous peoples* under Russian conditions see *Annex F Indigenous Peoples*.

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<p>3.1.5. There is a written agreement with <i>local indigenous people</i> on procedures to control harvesting and other <i>forest management</i> operations in sites where <i>local indigenous community</i> owns or uses natural resources.</p> <p>Notes: According to Art. 8 the <i>Guarantees for the Rights of Small-numbered Indigenous Nations of the Russian Federation</i> (as of May 12 1999) Act: “1. Small-numbered nations and organizations of small-numbered nations ... have right: 2) to take part in control over the use of lands of various categories, which are needed for traditional management and manufacturing traditional crafts of small-numbered nations and common mineral resources in places of traditional dwelling and management of small-numbered nations...”. According to the <i>Traditional Nature Use Areas of Small-numbered Indigenous Nations of the North, Siberia and the Far East of the Russian Federation Act</i> special <i>traditional nature use areas</i> can be designated</p>	<p>3.1.5.1. Agreement with regional and local indigenous communities (soobshchestvo or obshchina).</p> <p>3.1.5.2. Evidence of correspondence and minutes of meetings with authorized representatives of indigenous people.</p> <p>3.1.5.3. Interviews with enterprise managers.</p> <p>3.1.5.4. Interviews with local authorities.</p> <p>3.1.5.5. Interviews with regional and local indigenous organizations and local communities</p>
<p>3.1.6. The enterprise shall have a written procedure for dispute resolution and addressing grievances of <i>indigenous peoples</i> consistent with 3.1.5</p>	<p>3.1.6.1. A written procedure for dispute resolution.</p> <p>3.1.6.2. Interviews with enterprise managers.</p> <p>3.1.6.3. Interviews with local authorities.</p> <p>3.1.6.4. Interviews with regional and local indigenous organizations and local communities</p>
<p>3.1.7. Disputes and grievances regarding implementation of the agreements consistent with 3.1.5 are resolved through communication, negotiation or mediation. Legal procedures are used only if negotiations fail</p>	<p>3.1.7.1. A written procedure for dispute resolution.</p> <p>3.1.7.2. Register of disputes and grievances.</p> <p>3.1.7.3. Protocols of dispute resolution commission meetings, other information of agreements achieved.</p> <p>3.1.7.4. Evidence that disputants follow the agreements achieved.</p> <p>3.1.7.5. Interviews with district level forest management administration and/or relevant enforcement agencies.</p> <p>3.1.7.6. Interviews with enterprise managers.</p> <p>3.1.7.7. Interviews with local authorities.</p> <p>3.1.7.8. Interviews with regional and local indigenous organizations and local communities</p>
<p>3.1.8. The enterprise keeps a record of disputes and grievances of <i>indigenous peoples</i> consistent with 3.1.5 and of the status of their resolution</p>	<p>3.1.8.1. Register of disputes and grievances.</p> <p>3.1.8.2. Interviews with enterprise managers.</p> <p>3.1.8.3. Interviews with local authorities.</p> <p>3.1.8.4. Interviews with regional and local indigenous organizations and local communities.</p> <p>3.1.8.5. Interviews with ethnologists and/or regional history experts</p>
<p>3.1.9. There are no <i>outstanding disputes of substantial magnitude</i> between the enterprise and <i>indigenous peoples</i></p>	<p>3.1.9.1. Register of disputes and grievances.</p> <p>3.1.9.2. Interviews with enterprise managers.</p> <p>3.1.9.3. Interviews with local authorities.</p> <p>3.1.9.4. Interviews with regional and local indigenous organizations and local communities.</p> <p>3.1.9.5. Interviews with ethnologists and/or regional history experts</p>

Criteria 3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples	
Indicators	Means of verification
3.2.1. The enterprise jointly with <i>authorized representatives of indigenous communities</i> shall assess the risk of direct or indirect impacts of forestry operations on the livelihoods of <i>indigenous peoples</i> , their rights and natural resources they use (e.g. water resources, wild-life and plants)	<p>3.2.1.1. Minutes of consultations with indigenous organizations and communities or minutes of meetings on forest inventory and planning (lesoustroitelnoe soveshchanie).</p> <p>3.2.1.2. Materials for risk assessment of the impact of forestry operations.</p> <p>3.2.1.3. Documented assessment guidelines.</p> <p>3.2.1.4. Interviews with local authorities.</p> <p>3.2.1.5. Interviews with regional and local indigenous organizations and local communities.</p> <p>3.2.1.6. Interviews with ethnologists and/or regional history experts</p>
3.2.2. Management activities prescribed by the <i>forest management plan</i> do not threaten or diminish the natural resources or tenure rights of <i>indigenous peoples</i> and do not deteriorate their livelihoods	<p>3.2.2.1. Materials for risk assessment of the impact of forestry operations.</p> <p>3.2.2.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoeniya lesov (forest management plan).</p> <p>3.2.2.3. Interviews with local authorities.</p> <p>3.2.2.4. Interviews with regional and local indigenous organizations and local communities.</p> <p>3.2.2.5. Interviews with ethnologists and/or regional history experts</p>
3.2.3. Damage to natural resource on the <i>indigenous communities'</i> lands are compensated with account for losses of natural resources (e.g. hunting, fisheries, berries, mushrooms, plants) or deterioration of their quality (e.g. water) on the basis of an agreement with the <i>authorized representatives of indigenous communities</i>	<p>3.2.3.1. Written agreements with indigenous people, protocols of meetings.</p> <p>3.2.3.2. Documented evidence of damage.</p> <p>3.2.3.3. Documented evidence of damage compensation.</p> <p>3.2.3.4. Interviews with local authorities.</p> <p>3.2.3.5. Interviews with regional and local indigenous organizations and local communities</p>

Criteria 3.3. Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers	
Indicators	Means of verification
<p>3.3.1. The enterprise shall conduct consultations regarding the presence of sites of special cultural, ecological, economic or religious significance to <i>indigenous peoples</i> within the forest area being certified.</p> <p>Notes: Such information can be requested from the Department of Culture at the district administration; rural settlement administration; regional history museums (of town, region, village); research institutes (e.g. Institute of Literature, Language and History, Russian Academy of Sciences; Committees for state conservation of cultural heritage. See also <i>Annex E</i>, section <i>Categories of HCVF</i> and 9.1.5</p>	<p>3.3.1.1. Minutes of meetings, correspondence with indigenous peoples, local authorities, and research and education institutions.</p> <p>3.3.1.2. List of identified sites and objects, including maps.</p> <p>3.3.1.3. Interviews with specialists involved in conducting such consultations.</p> <p>3.3.1.4. Interviews with local authorities.</p> <p>3.3.1.5. Interviews with regional and local indigenous organizations and local communities.</p> <p>3.3.1.6. Interviews with ethnologists and/or regional history experts</p>
<p>3.3.2. Sites of special cultural, ecological, economic or religious significance to <i>indigenous peoples</i> have been identified in cooperation with them.</p> <p>Notes: See also <i>Annex E</i>, section <i>Categories of HCVF</i> and 9.1.5</p>	<p>3.3.2.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoeniya lesov (forest management plan).</p> <p>3.3.2.2. Evidence of consultations, list of identified sites and objects, including maps.</p> <p>3.3.2.3. Interviews with those involved in the identification process.</p> <p>3.3.2.4. Interviews with local authorities.</p> <p>3.3.2.5. Interviews with regional and local indigenous organizations and local communities.</p> <p>3.3.2.6. Interviews with ethnologists and/or regional history experts</p>
<p>3.3.3. Sites of special cultural, ecological, economic or religious significance are mapped taking into account concerns of <i>indigenous people</i>.</p> <p>Notes: Access to such maps can be restricted, if <i>indigenous people</i> consider that disclosure of detailed information on location of such sites could pose a threat to the existence or conservation of those areas</p>	<p>3.3.3.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoeniya lesov (forest management plan).</p> <p>3.3.3.2. List of identified sites, objects and ranges, including maps.</p> <p>3.3.3.3. Interviews with local authorities.</p> <p>3.3.3.4. Interviews with regional and local indigenous organizations and local communities</p>
<p>3.3.4. Sites consistent with 3.3.2 in the absence of objections from <i>indigenous peoples</i> are marked on-site.</p> <p>Notes: Thus, <i>indigenous people</i> could consider that disclosure of information on location of such sites could pose a threat to the existence or conservation of those areas</p>	<p>3.3.4.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoeniya lesov (forest management plan).</p> <p>3.3.4.2. List of identified sites and objects.</p> <p>3.3.4.3. Interviews with local authorities.</p> <p>3.3.4.4. Interviews with regional and local indigenous organizations and local communities.</p> <p>3.3.4.5. Field inspection</p>

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<p>3.3.5. Sites of special cultural, ecological, economic or religious significance are protected and/or have special management restrictions based on consultations with <i>authorized representatives of indigenous communities</i></p>	<p>3.3.5.1. Written agreements with indigenous people. 3.3.5.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoeniya lesov (forest management plan). 3.3.5.3. List of identified sites and objects. 3.3.5.4. Documents regulating the use or protection of the site, including maps. 3.3.5.5. Interviews with staff. 3.3.5.6. Interviews with local authorities. 3.3.5.7. Interviews with regional and local indigenous organizations and local communities. 3.3.5.8. Field inspection</p>
<p>3.3.6. The staff are informed of the location of sites consistent with 3.3.3 and management restrictions in them</p>	<p>3.3.6.1. Interviews with staff. 3.3.6.2. Field inspection</p>
<p>3.3.7. Management activities threatening such sites shall be stopped or suspended until decisions are made agreed with <i>authorized representatives of indigenous communities</i></p>	<p>3.3.7.1. Claims of indigenous peoples with regard to such sites and objects, cases when management activities have been suspended or relocated. 3.3.7.2. Protocols of meetings with authorized representatives of indigenous communities to resolve the disputes, agreements signed by representatives of both sides. 3.3.7.3. Maps. 3.3.7.4. Interviews with enterprise managers. 3.3.7.5. Interviews with local authorities. 3.3.7.6. Interviews with regional and local indigenous organizations and local communities. 3.3.7.7. Field inspection</p>

Criteria 3.4. Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence	
Indicators	Means of verification
3.4.1. Rights of <i>indigenous peoples</i> for commercial use of their traditional knowledge and skills regarding the use of forest species or management systems in forest are recognized and if possible documented	3.4.1.1. Documents on traditional knowledge and skills of indigenous peoples and their commercial use. 3.4.1.2. Interviews with enterprise managers. 3.4.1.3. Interviews with local authorities. 3.4.1.4. Interviews with regional and local indigenous organizations and local communities
3.4.2. The enterprise reached an agreement with <i>indigenous peoples</i> on compensation for the commercial application of their traditional knowledge and skills regarding the use of forest species or management systems in forest operations. Note: The agreement itself and the size of such compensation shall be formally agreed upon with <i>authorized representatives of indigenous communities</i> with their free and informed consent before forest operations commence	3.4.2.1. Agreement with indigenous peoples on compensation for application of their traditional knowledge and skills. 3.4.2.2. Interviews with local authorities. 3.4.2.3. Interviews with regional and local indigenous organizations and local communities. 3.4.2.4. Interviews with ethnologists and/or regional history experts
3.4.3. <i>Indigenous peoples</i> are compensated in consistence with 3.4.2	3.4.3.1. Agreement with indigenous peoples on compensation for application of their traditional knowledge and skills. 3.4.3.2. Documents of compensations paid to indigenous peoples. 3.4.3.3. Interviews with local authorities. 3.4.3.4. Interviews with regional and local indigenous organizations and local communities. 3.4.3.5. Interviews with ethnologists and/or regional history experts

PRINCIPLE 4: COMMUNITY RELATIONS AND WORKER'S RIGHTS

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

<i>Criteria 4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services</i>	
Indicators	Means of verification
4.1.1. All other conditions being equal, the enterprise gives employment priority to workers from <i>local communities</i>	4.1.1.1. List of staff with place of birth and address indicated. 4.1.1.2. Job contracts and agreements. 4.1.1.3. Interviews with local authorities. 4.1.1.4. Interviews with staff. 4.1.1.5. Interviews with local communities
4.1.2. The employment of workers from other regions of Russia and other countries should be justified	4.1.2.1. List of staff with place of birth and address indicated. 4.1.2.2. Job contracts and agreements. 4.1.2.3. Interviews with local authorities. 4.1.2.4. Interviews with staff. 4.1.2.5. Interviews with local communities. 4.1.2.6. Documents of the Migration Service
4.1.3. The enterprise does not discriminate staff on the basis of their sex, nationality, religion and other characteristics with regard to employment, workplace and human rights issues	4.1.3.1. Workers' grievances regarding their discrimination. 4.1.3.2. Interviews with enterprise managers. 4.1.3.3. Interviews with trade unions representatives. 4.1.3.4. Interviews with staff
4.1.4. The enterprise provides professional training and extension of professional knowledge and skills for staff from <i>local communities</i>	4.1.4.1. Records of training and extension courses for staff (programs of training and extension courses, lists of participants). 4.1.4.2. Documented professional skills. 4.1.4.3. Interviews with trade union representatives. 4.1.4.4. Interviews with staff
4.1.5. The enterprise participates in maintenance of the social infrastructure of forest villages. Note: in this case "forest village" implies settlements where most of enterprise's forest workers live as well as villages (derevnya, selo) and single-homestead rural settlements (khutors), both located within the forest area being certified and nearby, and directly affected by enterprise's <i>forest management</i> activities (e.g. through the exploitation of roads or forests traditionally used by <i>local people</i>)	4.1.5.1. Evidence of participation in maintenance of the local social infrastructure. 4.1.5.2. Interviews with enterprise managers. 4.1.5.3. Interviews with local authorities. 4.1.5.4. Interviews with local communities
4.1.6. The enterprise provides assistance to <i>local communities</i> , increasing the quality of their life	4.1.6.1. Evidence of providing assistance and services to local communities. 4.1.6.2. Interviews with enterprise managers. 4.1.6.3. Interviews with local authorities. 4.1.6.4. Interviews with local communities

Criteria 4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families	
Indicators	Means of verification
<p>4.2.1. The enterprise has health and safety laws and relevant administrative regulations.</p> <p>Note: The latter include technical regulations, interdepartmental and departmental safety regulations, interdepartmental and departmental template safety instructions, safety policy, equipment use and safety guidelines, state construction rules and standards, and state sanitary and epidemiological rules and standards</p>	<p>4.2.1.1. List of health and safety regulations.</p> <p>4.2.1.2. Availability of administrative health and safety regulations.</p> <p>4.2.1.3. Interviews with health and safety specialists.</p> <p>4.2.1.4. Interviews with staff</p>
<p>4.2.2. Legislation and administrative regulations on health and safety are available for staff</p>	<p>4.2.2.1. Interviews with staff.</p> <p>4.2.2.2. Availability of administrative health and safety regulations</p>
<p>4.2.3. Staff are familiar with health and safety rules</p>	<p>4.2.3.1. Health and safety training records.</p> <p>4.2.3.2. Interviews with health and safety specialists.</p> <p>4.2.3.3. Interviews with staff</p>
<p>4.2.4. The enterprise has a health and safety department or a respective specialist.</p> <p>Note: The number of personnel in the Health and Safety Department should correspond to the Interdepartmental regulations No. 10 <i>On Number of Health and Safety Personnel in Organizations</i> approved by the Ministry of Labor as of January 22 2001</p>	<p>4.2.4.1. Evidence of compliance of the Health and Safety Department to the Order No.10 of the Ministry of Labor as of January 22 2001.</p> <p>4.2.4.2. Rules for the Health and Safety Department (when applicable) or job description for the health and safety specialist.</p> <p>4.2.4.3. Interviews with health and safety specialists.</p> <p>4.2.4.4. Interviews with staff.</p> <p>4.2.4.5. Field inspection</p>
<p>4.2.5. The enterprise has certified working places</p>	<p>4.2.5.1. Materials on certification of working places.</p> <p>4.2.5.2. Register of health and safety training records.</p> <p>4.2.5.3. Interviews with health and safety specialists.</p> <p>4.2.5.4. Interviews with staff</p>
<p>4.2.6. There is a system of <i>administrative and public control</i> at the enterprise, which is carried out by the management, workers council, trade unions or a public representative on health and safety</p>	<p>4.2.6.1. Register of records of administrative and public control.</p> <p>4.2.6.2. Interviews with staff.</p> <p>4.2.6.3. Interview with representatives of workers council, trade unions or a public representative on health and safety.</p> <p>4.2.6.4. Interviews with those in charge of different levels of administrative and public control.</p> <p>4.2.6.5. Interviews with staff</p>
<p>4.2.7. Enterprise managers and health and safety specialists are trained in consistence to requirements of labor legislation</p>	<p>4.2.7.1. Labor legislation.</p> <p>4.2.7.2. Records of health and safety training of managers and health and safety specialists.</p> <p>4.2.7.3. Interviews with enterprise managers.</p> <p>4.2.7.4. Interviews with health and safety specialists</p>

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<p>4.2.8. Staff are trained in work safety measures.</p> <p>Note: Training should include instructing on health and safety, primary, recurring and unscheduled instruction and training at working place, and on first aid assistance for industrial injuries</p>	<p>4.2.8.1. Register of records of giving instructions at working place and admission to work with mandatory signatures of instructor and staff.</p> <p>4.2.8.2. List of professions and job positions, which do not require primary instructions at working place approved by the management and agreed with trade union committee and department (specialist) on health and safety.</p> <p>4.2.8.3. Interviews with health and safety specialists.</p> <p>4.2.8.4. Interviews with staff</p>
<p>4.2.9. Staff are tested on knowledge of health and safety requirements</p>	<p>4.2.9.1. Programs of training courses on health and safety.</p> <p>4.2.9.2. Administrative orders to establish a commission(s) for checking health and safety knowledge of workers and protocols of checks.</p> <p>4.2.9.3. Certificates of workers on passing inspections on health and safety.</p> <p>4.2.9.4. Approved schedule for verifying health and safety knowledge.</p> <p>4.2.9.5. Interviews with health and safety specialists.</p> <p>4.2.9.6. Interviews with staff</p>
<p>4.2.10. Forest workers are provided with certified individual safety equipment in accordance with legal requirements, but not lower than requirements of <i>ILO Code of Practice on Safety and Health in Forestry Work, 1998</i>) and <i>FSC-POL-30-401 FSC Certification and the ILO Conventions</i></p>	<p>4.2.10.1. <i>ILO Code of Practice on Safety and Health in Forestry Work</i> and <i>FSC-POL-30-401 FSC Certification and the ILO Conventions</i>.</p> <p>4.2.10.2. Standards for expenditure of individual safety equipment at the enterprise.</p> <p>4.2.10.3. Records of individual safety equipment expenditures.</p> <p>4.2.10.4. Interviews with staff.</p> <p>4.2.10.5. Field inspection</p>
<p>4.2.11. The requirements of health and safety regulations, including the use of relevant tools and machines and work clothing and personal protective equipment, are observed by the staff</p>	<p>4.2.11.1. Register of records of instructions.</p> <p>4.2.11.2. Schedules of public and administrative checks.</p> <p>4.2.11.3. Protocols of inspections and technical checks.</p> <p>4.2.11.4. Prescriptions by enforcement agencies.</p> <p>4.2.11.5. Documented evidence on decisions made.</p> <p>4.2.11.6. Interviews with enterprise managers.</p> <p>4.2.11.7. Interviews with health and safety specialists.</p> <p>4.2.11.8. Field inspection</p>

Criteria 4.3. The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labor Organization (ILO)	
Indicators	Means of verification
4.3.1. Enterprise managers and staff are familiar with the main provisions of ILO Conventions 87 and 98, which regulate rights of workers to be free to organize and voluntarily negotiate with their employers and relevant provisions of federal tariff agreements	4.3.1.1. Availability of conventions, Federal Tariff Agreement of the Russian Federations for State Forest Management for 2007–2008 between Trade Union of Workers of Forest Industries of the Russian Federation (Roslesprofsoyuz) and Federal Forestry Agency of the Russian Federation, Federal Service for the Oversight of Natural Resources of the Russian Federation, Ministry of Natural Resources of the Russian Federation and Federal Tariff Agreement of the Russian Federations for Forest Industries for 2006–2008 between Roslesprofsoyuz and All-Russia Industrial Union of Employers “Union of Forest Industrialists and Forest Exporters of Russia and Ministry of Industries and Energy of the Russian Federation (or alike) at the enterprise for workers. 4.3.1.2. Interviews with enterprise managers. 4.3.1.3. Interviews with staff
4.3.2. Conditions of the tariff agreements for the state forest management and forest industries regarding the rights of workers to be free to establish organizations with other workers or join such organizations without employer’s preliminary permission as well as to voluntarily negotiate with their with employers are observed	4.3.2.1. Availability of a trade union or other forms of workers organization. 4.3.2.2. Federal tariff agreements and collective labor agreement. 4.3.2.3. Reports on observation of the collective labor agreement and tariff agreements. 4.3.2.4. Records of disputes with workers and their grievances as well as status of their consideration. 4.3.2.5. Interviews with trade union representatives. 4.3.2.6. Interviews with staff
4.3.3. There are no <i>disputes of substantial magnitude</i> involving employees and enterprise managers	4.3.3.1. Procedure for dispute resolution. 4.3.3.2. Register of disputes and grievances as well as reports of resolution by means of meetings and negotiations etc. 4.3.3.3. Reports on observation of the tariff agreements. 4.3.3.4. The absence of evidence of pressure on employees, their discrimination or discharge related to their grievances on employers or participation in negotiations. 4.3.3.5. Interviews with enterprise managers. 4.3.3.6. Interviews with staff

Criteria 4.4. Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations	
Indicators	Means of verification
4.4.1. The staff are provided with opportunities to give feedback regarding social impact of management activities and major management decisions (e.g. employment issues)	4.4.1.1. Proposals by staff, stakeholder consultations with workers representatives. 4.4.1.2. Interviews with staff
4.4.2. During management planning and operations <i>local communities</i> , local authorities and other <i>stakeholders</i> are provided with opportunities to give feedback regarding social impact of forest operations (e.g. <i>forest management</i> restrictions in particular sites, <i>silvicultural</i> and harvesting methods used, construction and maintenance of roads, and employment issues). Note: With respect to <i>local communities</i> 3.1.2–3.1.4 shall be also considered	4.4.2.1. Proposals by local authorities and local communities, protocols of stakeholder consultations and minutes of public hearings, formal community wide gatherings of residents (skhod). 4.4.2.2. Mass media publications. 4.4.2.3. Interviews with local authorities. 4.4.2.4. Interviews with local communities
4.4.3. Proposals consistent with 4.4.1 and 4.4.2 are considered on the basis of consultations between enterprise and staff, <i>local communities</i> and other <i>stakeholders</i> . Note: When considering proposals interests of people and groups (both men and women) shall be equally considered	4.4.3.1. List of stakeholders. 4.4.3.2. Protocols and minutes of public hearings, formal community wide gatherings of residents, forest inventory meetings and consultations. 4.4.3.3. Evidence of communications with forest survey staff and/or local authorities and other stakeholders. 4.4.3.4. Interviews with staff. 4.4.3.5. Interviews with local communities. 4.4.3.6. Interviews with stakeholders
4.4.4. All collected proposals and management's response to them are available to the public	4.4.4.1. Protocols and minutes of public hearings, formal community wide gatherings of residents, forest inventory meetings and regular consultations. 4.4.4.2. Written conclusions of collected proposals. 4.4.4.3. Interviews with local communities. 4.4.4.4. Interviews with stakeholders
4.4.5. Proposals accepted in consistence with 4.4.3 are reflected in the <i>forest management plan</i> and enterprise's operating guidelines	4.4.5.1. Written conclusions of collected proposals. 4.4.5.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 4.4.5.3. Interviews with enterprise managers. 4.4.5.4. Interviews with stakeholders
4.4.6. Proposals accepted in consistence with 4.4.3 are implemented during <i>forest management</i> operations	4.4.6.1. Written conclusions of collected proposals. 4.4.6.2. Harvesting documents (forest declarations, harvesting permits or orders). 4.4.6.3. Interviews with enterprise managers. 4.4.6.4. Interviews with stakeholders

Criteria 4.5. Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage	
Indicators	Means of verification
<p>4.5.1. The enterprise undertakes preventive steps to avoid loss or damage affecting <i>legal or customary rights</i>, property, resources or livelihoods of <i>local communities</i> caused by <i>forest management</i> activities.</p> <p>Note: Measures aimed at taking into account concerns of <i>local communities</i> and reduction of adverse impact on the environment and natural resources see 2.2, 2.3, 3.2, 3.3, 5.5, 6.2, 6.3 and 6.5</p>	<p>4.5.1.1. List of measures aimed to take consider concerns of local communities and to reduce adverse impact on the environment and natural resources.</p> <p>4.5.1.2. Protocols of consultations with local communities.</p> <p>4.5.1.3. Interviews with enterprise managers.</p> <p>4.5.1.4. Interviews with staff</p>
<p>4.5.2. The enterprise has a written procedure for resolving grievances and for providing compensation in the case of loss or damage by management activities agreed with <i>local communities</i></p>	<p>4.5.2.1. Procedure for resolving grievances and for providing compensations in the case of loss and damage</p>
<p>4.5.3. The enterprise keeps a record of disputes and grievances regarding loss and damage compensations and of their status</p>	<p>4.5.3.1. Procedure for resolving grievances and for providing compensations in the case of loss and damage.</p> <p>4.5.3.2. Register of records of grievance resolution and compensation of losses and damage.</p> <p>4.5.3.3. Interviews with enterprise managers.</p> <p>4.5.3.4. Interviews with local communities</p>
<p>4.5.4. Disputes and grievances regarding loss and damage compensations are resolved through communication, negotiation or mediation. Legal procedures are used only if negotiations fail</p>	<p>4.5.4.1. Procedure for resolving grievances and for providing compensations in the case of loss and damage.</p> <p>4.5.4.2. Register of records of grievance resolution and compensation of losses and damage.</p> <p>4.5.4.3. Protocols of conflict resolution committee meetings, agreements reached.</p> <p>4.5.4.4. Availability of information on observation of the reached agreements by disputants.</p> <p>4.5.4.5. Interviews with district level forest management administration and/or enforcement agencies in the sphere of forest management.</p> <p>4.5.4.6. Interviews with enterprise managers.</p> <p>4.5.4.7. Interviews with local authorities.</p> <p>4.5.4.8. Interviews with local communities</p>
<p>4.5.5. There are no <i>disputes of substantial magnitude</i> between the enterprise and <i>local communities</i></p>	<p>4.5.5.1. Interviews with enterprise managers.</p> <p>4.5.5.2. Interviews with local communities</p>

PRINCIPLE 5: BENEFITS FROM THE FOREST

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits

Criteria 5.1. Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest	
Indicators	Means of verification
<p>5.1.1. The enterprise has the resources to implement the <i>forest management plan</i> and all associated management activities (in particular harvesting, road construction, <i>silvicultural operations</i>, forest protection and monitoring, identification, and protection of <i>HCVF</i> and <i>key habitats</i>).</p> <p>Note: Such resources may belong to the resources of enterprise itself or be provided by affiliated or partner organizations or resources provided by federal or regional budgets</p>	<p>5.1.1.1. Materials of economic justification of forestry activities.</p> <p>5.1.1.2. Economic analysis of fulfillment of the financial plan for the current and past years.</p> <p>5.1.1.3. Financial results of enterprise's activity (balance report).</p> <p>5.1.1.4. Financial plan.</p> <p>5.1.1.5. Interviews with enterprise managers.</p> <p>5.1.1.6. Conclusions of independent financial audit.</p> <p>5.1.1.7. Written commitment of affiliated or partner organizations to allocate relevant resources</p>
<p>5.1.2. The management activities are economically sustainable and capable of providing a level of investment sufficient to ensure the survival of the organization in <i>long term</i>, while taking into account all environmental, social and operational expenditures</p>	<p>5.1.2.1. Financial plan.</p> <p>5.1.2.2. Economic analysis of fulfillment of the financial plan</p> <p>5.1.2.3. Balance report or financial results of enterprise's activity.</p> <p>5.1.2.4. Enterprise's plans to increase revenues/profitability and to reduce costs.</p> <p>5.1.2.5. Interviews with enterprise managers</p>
<p>5.1.3. The enterprise allocates funding for <i>silvicultural</i>, fire protection, and <i>forest regeneration operations</i> sufficient to implement the <i>forest management plan</i></p>	<p>5.1.3.1. Financial plan and other documents.</p> <p>5.1.3.2. Economic analysis of fulfillment of the financial plan.</p> <p>5.1.3.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.1.3.4. Field inspection</p>
Criteria 5.2. Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products	
Indicators	Means of verification
<p>5.2.1. The enterprise seeks the best economic use of forest resources, taking into account its financial and technical possibilities.</p> <p>Notes: Such activity may include marketing of various products, product sorting and grade recovery of harvested timber as well as its processing</p>	<p>5.2.1.1. List and volumes of different kinds of proposed products.</p> <p>5.2.1.2. List of enterprise's buyers.</p> <p>5.2.1.3. Trend over recent years of kinds and volumes of products obtained by different grades.</p> <p>5.2.1.4. Trend over recent years of sales in value by product.</p> <p>5.2.1.5. Evidence of enterprise's efforts to explore new markets for forest products.</p> <p>5.2.1.6. Interviews with enterprise managers</p>

<p>5.2.2. The enterprise processes harvested forest resources, if this is economically and technically justified, or delivers the resources to local or regional wood processing enterprises</p>	<p>5.2.2.1. Records of product sales. 5.2.2.2. List of buyers of enterprise's products. 5.2.2.3. Documents on change in types and volumes of products by category in the last years. 5.2.2.4. Record of change in types and volumes of products by category in recent years. 5.2.2.5. Evidence of the enterprise's efforts to increase the share of self-processing and/or the share of local/regional buyers of wood products. 5.2.2.6. Interviews with enterprise managers. 5.2.2.7. Interviews with local wood processors</p>
<p>Criteria 5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources</p>	
<p>Indicators</p>	<p>Means of verification</p>
<p>5.3.1. The enterprise uses all merchantable harvested wood.</p> <p>Note: Some merchantable trees shall be retained to maintain biological diversity and to provide <i>forest regeneration</i> and patchiness of forest environment. See 6.2 and 6.3 and <i>Annex C</i>, section <i>Identification and Protection of Habitats of Rare, Threatened, and Endangered Species of Plants, Animals, and Fungi</i></p>	<p>5.3.1.1. Data on harvesting, use and sales of merchantable timber during the last years 5.3.1.2. Evidence of the use of low-waste timber. 5.3.1.3. List of measures on biodiversity protection and forest regeneration. 5.3.1.4. Interviews with enterprise managers. 5.3.1.5. Field inspection</p>
<p>5.3.2. The enterprise, if it is economically and technically justified, utilizes wood waste that represent marketable secondary wood resources (small diameter boles, snags, short cuts, wood dust etc.), and products of their on-site processing (e.g. chips) under condition that this does not exert adverse implications on forest productivity, biodiversity, and <i>forest regeneration</i>.</p> <p>Note: The use of slash residues see 6.3.13 and 6.3.14, requirements on deadwood see 6.3.10. See also Criterion 6.2 and <i>Annex C</i>, section <i>Identification and Protection of Habitats of Rare, Endangered, and Threatened Species of Plants, Animals, and Fungi</i></p>	<p>5.3.2.1. Levels of waste production approved by enterprise management, relevant instructions. 5.3.2.2. Data on waste production and their dynamics during the recent years. 5.3.2.3. Evidence of the use of waste and low quality timber. 5.3.2.4. List of measures on biodiversity protection and forest regeneration. 5.3.2.5. Interviews with enterprise managers. 5.3.2.6. Interviews with enterprise specialists. 5.3.2.7. Field inspection</p>
<p>5.3.3. Harvesting and <i>silvicultural operations</i> should not lead to the unjustified damage to <i>key habitats</i> being left, the residual trees and their groups (young growth and seed trees and other <i>key stand elements</i>), as well as trees being left for future harvest</p>	<p>5.3.3.1. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 5.3.3.2. List of measures for biodiversity protection and forest regeneration. 5.3.3.3. Relevant administrative regulations. 5.3.3.4. Interviews with enterprise managers. 5.3.3.5. Interviews with enterprise specialists. 5.3.3.6. Field inspection</p>
<p>5.3.4. Harvesting and <i>silvicultural operations</i> do not lead to complete or partial destruction of sites of special significance for maintenance and reproduction of other forest resources (recreation, water, soil, fisheries, mushrooms, berries etc.).</p> <p>Note: See also 5.5.6, 6.2.6–6.2.10, and 6.5</p>	<p>5.3.4.1. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 5.3.4.2. List of measures to minimize damage to other forest resources. 5.3.4.3. Interviews with local communities. 5.3.4.4. Interviews with enterprise managers. 5.3.4.5. Interviews with enterprise specialists. 5.3.4.6. Field inspection</p>

Criteria 5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product	
Indicators	Means of verification
5.4.1. When planning <i>forest management</i> the enterprise explores technical and financial feasibilities of producing a range of forest goods and services	5.4.1.1. Evidence of the practicality of producing a range of goods and services, considering financial and technical limitations, the structure of supply and demand and their potential change in future. 5.4.1.2. Evidence of enterprise's efforts to explore new markets and to produce a range of goods and services. 5.4.1.3. Interviews with enterprise managers
5.4.2. The enterprise, if economically practical, increases a diversity of goods and services delivered to the market, including those demanded in the local market. Note: In some administrative regions of the Russian Federation, regional authorities could implement a program to encourage diversification of production	5.4.2.1. List and volumes of offered products by category. 5.4.2.2. List of buyers. 5.4.2.3. Change in kinds and volumes of products by category over recent years. 5.4.2.4. Participation in the regional program for diversification of production. 5.4.2.5. Interviews with enterprise managers. 5.4.2.6. Interviews with local buyers
5.4.3. The enterprise does not prevent development of different kinds of forest use (e.g. collection of mushrooms and berries, hunting, recreation) within the forest area being certified	5.4.3.1. Documents that permit the use of forest. 5.4.3.2. List of types of forest use. 5.4.3.3. Interviews with enterprise managers. 5.4.3.4. Interviews with local authorities. 5.4.3.5. Interviews with local communities

Criteria 5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries	
Indicators	Means of verification
<p>5.5.1. Protective zones are established along all water streams, lakes and bogs (high moors).</p> <p>Note: <i>Water protective</i> (riparian) <i>zones</i> around bogs (including forested ones) also can be established as <i>OZU</i> or <i>non-exploitable areas (NEP)</i></p>	<p>5.5.1.1. Water Code of the Russian Federation, administrative regulations regarding OZU.</p> <p>5.5.1.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.5.1.3. Maps with marked water protective zones (protective forests, OZU).</p> <p>5.5.1.4. Field inspection</p>
<p>5.5.2. The dimensions of <i>water protective zones</i> shall be not smaller than prescribed by the federal laws</p>	<p>5.5.2.1. Water Code of the Russian Federation, administrative regulations regarding OZU.</p> <p>5.5.2.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.5.2.3. Maps with marked water protective zones (protective forests, OZU).</p>
<p>5.5.3. The dimensions of <i>water protective zones</i> along areas of special significance for fisheries (spawning grounds, fattening, and wintering of fish and other water biological resources) shall be sufficient for their conservation</p>	<p>5.5.3.1. Water Code of the Russian Federation, administrative regulations regarding OZU.</p> <p>5.5.3.2. Scientific evidence, including maps.</p> <p>5.5.3.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.5.3.4. Maps with marked water protective zones (protective forests, OZU).</p> <p>5.5.3.5. Field inspection</p>
<p>5.5.4. <i>Water protective zones</i> within the zone of harvesting operations are marked on site with “Stop!” signs and restrictive road signs</p>	<p>5.5.4.1. Forest inventory materials with descriptions of individual stands.</p> <p>5.5.4.2. Maps with water protective zones (protective forests, OZU).</p> <p>5.5.4.3. Field inspection</p>
<p>5.5.5. Wetlands are drained only if this is required for restoration of their natural hydrological regime</p>	<p>5.5.5.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.5.5.2. Documents of forest reclamation works.</p> <p>5.5.5.3. Field inspection</p>
<p>5.5.6. Forest operations within <i>water protective zones</i> along water streams of all types (<i>protective forests</i> and <i>OZU</i>) do not undermine the ecological value of these territories.</p> <p>Note: See 8.2.12</p>	<p>5.5.6.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.5.6.2. Plan of forest operations with maps.</p> <p>5.5.6.3. Results of monitoring (see Criterion 8.2).</p> <p>5.5.6.4. Interviews with local communities.</p> <p>5.5.6.5. Interview with fishery inspector.</p> <p>5.5.6.6. Interview with water resources inspector (Rosvodnadzor).</p> <p>5.5.6.7. Interview with protection and/or enforcement agencies in the sphere of management of natural resources.</p> <p>5.5.6.8. Field inspection</p>

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<p>5.5.7. <i>Forest management</i> shall not lead to forest erosion and paludification of soils</p>	<p>5.5.7.1. Records of monitoring of the impact of forest management consistent with 8.2, results of research. 5.5.7.2. Interviews with stakeholders. 5.5.7.3. Field inspection</p>
<p>5.5.8. <i>Forest management</i> does not diminish protective functions of watersheds within the forest area being certified: water quality due to pollution, suspended load or eutrophication and the hydrological regime</p>	<p>5.5.8.1. Records of monitoring of the impact of forest management consistent with 8.2. 5.5.8.2. Interviews with local communities. 5.5.8.3. Interviews with stakeholders. 5.5.8.4. Field inspection</p>
<p>5.5.9. <i>Forest management</i> does not diminish the accessibility of resources of non-timber forest products (wildlife, fish, berries and mushrooms) for <i>local communities</i></p>	<p>5.5.9.1. Records of monitoring of the impact of forest management consistent with 8.2. 5.5.9.2. Interviews with local communities. 5.5.9.3. Interviews with stakeholders.</p>

Criteria 5.6. The rates of harvest of forest products shall not exceed levels which can be permanently sustained	
Indicators	Means of verification
<p>5.6.1. The <i>annual allowable cut (AAC)</i> and total expected <i>annual timber removals</i> are determined by forest management groups, <i>management units</i> and <i>management sections</i>.</p> <p>Note: Total expected <i>annual timber removals</i> shall account for all types of harvesting (including <i>silvicultural operations</i> and salvage logging). When necessary they should be revised considering losses of merchantable timber occurring due to forest fires, <i>pest</i> outbreaks and massive windfalls</p>	<p>5.6.1.1. Guidelines for determining AAC (<i>raschetnaya lesoseka/dopustimaya norma polzovaniya</i>).</p> <p>5.6.1.2. Rational for the method for determining ACC for each management section, lease as a whole or it separate area.</p> <p>5.6.1.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.6.1.4. Annual monitoring data.</p> <p>5.6.1.5. Interviews with enterprise managers</p>
<p>5.6.2. The following volumes of timber shall be excluded from the applicable AAC:</p> <ul style="list-style-type: none"> • harvesting of which is prohibited or restricted by the regime of <i>protected sites</i>⁸; • harvesting of which is permitted but would not be possible due to economic inaccessibility or insufficient growing stock (<i>economically inaccessible forests</i>) 	<p>5.6.2.1. Guidelines for determining annual allowable cut (<i>raschetnaya lesoseka/dopustimaya norma polzovaniya</i>).</p> <p>5.6.2.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.6.2.3. Calculation of annual timber removals</p>
<p>5.6.3. <i>Annual timber removals</i> for each <i>management section</i> shall not lead to reduction of the <i>allowable annual cut</i> in the <i>short</i> or <i>long term</i>, neither overall, nor for <i>economically accessible forests</i>.</p> <p>Note: The only exception is the lowering of AAC for <i>management sections</i>, whose area shall be reduced in consistence with <i>long-term</i> management objectives</p>	<p>5.6.3.1. Lease agreement.</p> <p>5.6.3.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.6.3.3. Report on annual timber removals.</p> <p>5.6.3.4. Graph showing the AAC dynamics over the period greater than half of a rotation period (duration of long-term lease) in general and separately for economically accessible forests</p>
<p>5.6.4. The <i>annual timber removals</i> shall be documented for each <i>harvest area</i> (<i>lesoseka</i>)</p>	<p>5.6.4.1. Records showing annual timber removals.</p> <p>5.6.4.2. Harvesting documents (forest declaration, harvesting permits or orders).</p> <p>5.6.4.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>5.6.4.4. Field inspection</p>

⁸ Hereinafter *protected sites* are understood as existing protected areas and candidate areas, *protective forests*, *OZU*, including candidate areas of ecological network and any areas voluntarily set aside for conservation by the enterprise.

<p>5.6.5. The harvesting document for a particular <i>harvest area</i> (lesoseka), including a technological map, shall contain at least the following information:</p> <ul style="list-style-type: none"> • location, including forest management group, block (kvartal), section (vydel), <i>harvest area</i>; • type of management operation (use); • type and technique of harvesting or type of harvestable resource; • grade of harvested timber; • size of <i>harvest area</i>; • pre-harvest stand composition; • area at which young growth shall be retained; • volume of harvested timber or other resources; • indication which trees shall and shall not be harvested; • timelines for timber harvesting and removal from forest; • <i>non-exploitable areas (NEP)</i>, other retention stands; • forest protection measures and their timelines; • method for clearing the <i>harvest area</i>; • peculiarities of harvesting techniques; • <i>forest regeneration</i> activities; • industrial and household waste disposal sites; • waste removal 	<p>5.6.5.1. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 5.6.5.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan)</p>
<p>5.6.6. The use of <i>secondary forest resources</i> within the forest area being certified is documented</p>	<p>5.6.6.1. Harvesting documents for secondary forest resources. 5.6.6.2. Interviews with district level forest management administration. 5.6.6.3. Interviews with staff</p>
<p>5.6.7. The use of <i>secondary forest resources</i> within the forest area being certified does not lead to depletion of respective resources</p>	<p>5.6.7.1. Harvesting documents for secondary forest resources. 5.6.7.2. Interviews with district level forest management administration. 5.6.7.3. Interviews with staff. 5.6.7.4. Interviews with local communities. 5.6.7.5. Field inspection</p>

PRINCIPLE 6: ENVIRONMENTAL IMPACT

Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes and, by so doing, maintain the ecological functions and the integrity of the forest

<i>Criteria 6.1. Assessments of environmental impacts shall be completed – appropriate to the scale, intensity of forest management and the uniqueness of the affected resources – and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations</i>	
Indicators	Means of verification
6.1.1. The <i>environmental impact assessment (OVOS)</i> and/or <i>State Environmental Expertise (ekologicheskaya ekspertiza, EE)</i> for the <i>forest management plan</i> has been conducted, taking into consideration the unique and/or protected resources within the forest area being certified	6.1.1.1. Materials of OVOS and/or EE. 6.1.1.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan) 6.1.1.3. Interviews with enterprise specialists
6.1.2. During the <i>environmental impact assessment</i> and/or <i>State Environmental Expertise</i> materials of surveys for <i>rare, threatened, and endangered species</i> of plants, fungi, and animals listed in the Red Data Book of the Russian Federation and regional red data books (lists) (see <i>Annex C</i>) as well as of species subject to multilateral agreements on environment protection ratified by Russia (see <i>Annex B</i>) have been taken into account	6.1.2.1. Materials of OVOS or EE. 6.1.2.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.1.2.3. Red Data Book of the Russian Federation and regional red data books (lists) and the list of species subject to multilateral agreements on environment protection ratified by Russia. 6.1.2.4. Survey materials, including maps of rare, threatened and endangered species. 6.1.2.5. Methods, guidelines and guidelines for identification and protection of rare, threatened and endangered species. 6.1.2.6. Interviews with enterprise specialists. 6.1.2.7. Interviews with district level forest management administration
6.1.3. The <i>environmental impact assessment</i> and/or <i>State Environmental Expertise</i> have taken into account survey materials for <i>high conservation value forests (HCVF)</i> and <i>representative samples of forest ecosystems</i> and their relative position with existing and candidate protected areas, <i>water protective zones, OZU</i> , and approved maps and plans of ecological networks (see <i>Annexes D and E</i>)	6.1.3.1. Materials of OVOS or EE. 6.1.3.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.1.3.3. Materials of surveys and maps of HCVF, representative samples of forest ecosystems, water protective zones, existing and candidate protected areas, and approved maps and plans of ecological networks and OZU. 6.1.3.4. Methods and guidelines for identification and protection of HCVF and representative samples of forest ecosystems. 6.1.3.5. Agreements with stakeholders on protection of HCVF. 6.1.3.6. Interviews with enterprise specialists. 6.1.3.7. Interviews with district level forest management administration. 6.1.3.8. Interviews with stakeholders

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<p>6.1.4. The <i>environmental impact assessment</i> and/or <i>State Environmental Expertise</i> shall include the assessment of landscape level considerations (district level forest management administration unit) of management guidelines (harvesting techniques, silvicultural system, guidelines on biodiversity protection etc.)</p>	<p>6.1.4.1. Materials of OVOS or EE. 6.1.4.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.1.4.3. Management guidelines. 6.1.4.4. Interviews with enterprise specialists. 6.1.4.5. Interviews with district level forest management administration</p>
<p>6.1.5. The <i>environmental impact assessment</i> and/or <i>State Environmental Expertise</i> shall include the assessment of the impacts of on-site processing facilities of management guidelines (harvesting techniques, silvicultural system, guidelines on biodiversity protection etc.)</p>	<p>6.1.5.1. Materials of OVOS or EE. 6.1.5.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.1.5.3. Management guidelines. 6.1.5.4. Interviews with enterprise specialists. 6.1.5.5. Interviews with district level forest management administration</p>
<p>6.1.6. During the <i>environmental impact assessment</i> and/or <i>State Environmental Expertise</i> the rationale for and sustainability of the recommended level of <i>annual timber removals (annual allowable cut)</i> shall be assessed</p>	<p>6.1.6.1. Rationale for AAC and recommended level of annual timber removal. 6.1.6.2. Materials of OVOS or EE. 6.1.6.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.1.6.4. Interviews with enterprise specialists. 6.1.6.5. Interviews with district level forest management administration</p>
<p>6.1.7. The enterprise controls and evaluates the impact of <i>silvicultural</i> and <i>harvesting operations</i> on the environment at a site level</p>	<p>6.1.7.1. Written operating guidelines for planning and carrying out silvicultural and harvesting operations. 6.1.7.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.1.7.3. Certificates of harvest area inspections and technical inspection reports. 6.1.7.4. Harvesting documents (forest declaration, harvesting permits or orders), including map. 6.1.7.5. Field inspection</p>
<p>6.1.8. The enterprise takes into account the results of the <i>environmental impact assessment</i> and/or <i>State Environmental Expertise</i> consistent with 6.1.2–6.1.7 when preparing and implementing management plans</p>	<p>6.1.8.1. Materials of OVOS or EE. 6.1.8.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.1.8.3. Interviews with enterprise specialists. 6.1.8.4. Field inspection</p>

Criteria 6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g. nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled	
Indicators	Means of verification
<p>6.2.1. The enterprise has compiled a list of sites and/or species of wild flora and fauna occurring within the forest area being certified that pertain to <i>CITES, Convention on Biological Diversity, Ramsar Convention, Convention for the Protection of the World Cultural and Natural Heritage</i>, as well as bilateral agreements on nature conservation.</p> <p>Note: See <i>Annexes B</i> and <i>C</i></p>	<p>6.2.1.1. Texts of conventions and relevant agreements ratified by Russia.</p> <p>6.2.1.2. List of relevant species and areas.</p> <p>6.2.1.3. Maps if necessary.</p> <p>6.2.1.4. Licenses if relevant</p>
<p>6.2.2. The enterprise has compiled a list of <i>rare, threatened, and endangered species</i> as well as species vulnerable and sensitive to disturbances occurring within the forest area being certified and their typical <i>habitats</i>. The lists shall be based on federal or regional red data books and consider species, which can be threatened by management activities (see <i>Annex C</i>)</p>	<p>6.2.2.1. Red data books of rare, threatened and endangered species of the Russian Federation and regions of the Russian Federation or respective official lists (<i>perechen</i>).</p> <p>6.2.2.2. Lists of relevant species occurring in the area.</p> <p>6.2.2.3. Lists and key characteristics of likely habitats of the relevant species occurring in the area</p>
<p>6.2.3. The enterprise collects available information on the occurrence of <i>key habitats: habitats critical for rare, threatened, and endangered species</i> of plants, fungi, and invertebrates as well as for life cycles (reproduction, raising young animals, fattening, rest, migration etc.) of vertebrates occurring within the forest area being certified.</p> <p>Note: The <i>key habitats</i> may include habitats with high probability of the non-accidental occurrence of <i>rare, threatened, endangered</i>, as well as vulnerable, and care demanding <i>species</i> (see <i>Annex C</i>, sections <i>Identification and Protection of Habitats of Rare, Threatened, and Endangered Plants, Animals, and Fungi</i> and <i>Identification and Protection of Key Stand Elements during Harvesting</i>)</p>	<p>6.2.3.1. Review of available materials on rare, threatened and endangered species, including maps.</p> <p>6.2.3.2. Methods for identification of rare, threatened and endangered species.</p> <p>6.2.3.3. Interviews with enterprise specialists.</p> <p>6.2.3.4. Interviews with stakeholders</p>
<p>6.2.4. The enterprise conducts additional field surveys and/or uses other methods for identification of <i>key habitats</i> consistent with 6.2.1 and taking into account 6.2.2 and measures on biodiversity conservation at the stand level (<i>harvest area</i>) (see 6.3.9 and 6.3.10).</p> <p>Note: See further <i>Annex C</i>, sections <i>Identification and Protection of Habitats of Rare, Threatened, Endangered Plants, Animals, and Fungi</i> and <i>Identification, and Protection of Key Stand Elements during Harvesting</i></p>	<p>6.2.4.1. Methods for identification of rare, threatened and endangered species.</p> <p>6.2.4.2. Materials of field surveys.</p> <p>6.2.4.3. Interviews with enterprise specialists.</p> <p>6.2.4.4. Interviews with stakeholders</p>

<p>6.2.5. Identified <i>critical habitats</i> with high concentration of <i>rare, threatened, and endangered species</i> of plants, animals, and fungi (<i>key habitats</i>) are mapped</p>	<p>6.2.5.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.2.5.2. Materials of field surveys, maps</p>
<p>6.2.6. The enterprise shall develop a system of measures for protection of <i>key habitats of rare, threatened, and endangered species</i>.</p> <p>Notes: Measures on protection of <i>rare, threatened, and endangered species</i> may completely prohibit or restrict management activities in sites of occurrence of such species and in habitats with high probability of the non-accidental occurrence of <i>rare, threatened, endangered</i> as well as vulnerable and care demanding species. See further <i>Annex C, sections Identification and Protection of Habitats of Rare, Threatened, and Endangered Plants, Animals, and Fungi</i> and <i>Identification and Protection of Key Stand Elements during Harvesting</i></p>	<p>6.2.6.1. System of measures for protection of key habitats. 6.2.6.2. Interviews with enterprise specialists. 6.2.6.3. Interviews with stakeholders</p>
<p>6.2.7. The enterprise implements measures for the protection of <i>rare, threatened, and endangered species</i> in <i>protected sites</i> and voluntarily provides protection of newly identified <i>key habitats</i></p>	<p>6.2.7.1. System of measures for protection of key habitats. 6.2.7.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.2.7.3. Harvesting documents (forest declarations, harvest permits or orders), including maps. 6.2.7.4. Interviews with enterprise specialists. 6.2.7.5. Field inspection</p>
<p>6.2.8. The enterprise has compiled a list of main game species occurring within the forest area being certified and their <i>key habitats</i> based on consultations with game specialists and representatives of societies of hunters and fishermen.</p> <p>Notes: Examples of <i>key habitats</i> for vertebrates are natural outcrops of salt-bearing rocks, rock outcrops, swamps, sparse forests, burnt and standing deadwood areas, areas rich with berries, bear lairs, places of winter concentration of hoofed animals, and nesting grounds of large birds</p>	<p>6.2.8.1. Lists of game species and their potential key habitats. 6.2.8.2. Plans of management operations, technological maps. 6.2.8.3. Documentation regarding protected sites. 6.2.8.4. Evidence of communication, reports and minutes of meetings with game specialists and representatives of societies of hunters and fishermen. 6.2.8.5. Interviews with representatives of societies of hunters and fishermen</p>
<p>6.2.9. The enterprise shall develop a system of measures for protecting <i>key habitats</i> of game species based on consultations with game specialists and representatives of societies of hunters and fishermen</p>	<p>6.2.9.1. System of measures for protection of key habitats of game species. 6.2.9.2. Interviews with enterprise specialists. 6.2.9.3. Interviews with representatives of societies of hunters and fishermen</p>

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<p>6.2.10. The enterprise implements measures for protection of <i>key habitats</i> of game species in <i>protected sites</i> and voluntarily provides protection of newly identified <i>key habitats</i></p>	<p>6.2.10.1. System of measures for protection of key habitats of game species. 6.2.10.2. Reports of activities. 6.2.10.3. Interviews with local communities. 6.2.10.4. Interviews with fishery and hunting inspectors. 6.2.10.5. Interviews with representatives of societies of hunters and fishermen. 6.2.10.6. Interviews with enterprise specialists. 6.2.10.7. Field inspection</p>
<p>6.2.11. The enterprise has <i>protected sites</i> with management restrictions within the forest area being certified, which provide protection of <i>HCVF</i>, <i>representative samples of existing ecosystems</i> and sites with high concentration of <i>rare, threatened, and endangered</i> plants, invertebrates and fungi as well as areas of special significance for life cycles of vertebrates.</p> <p>Note: <i>Protected sites</i> may include existing and candidate protected areas (see <i>Annex D</i>); important bird areas of Russia and Ramsar wetlands (both see <i>Annex E</i>); <i>OZU</i> and <i>protective forests</i>, including candidate areas for ecological networks; and any areas voluntarily set aside by the enterprise. See further <i>Annex C</i>, Criterion 6.4, Principle 9, and <i>Annex E</i>, section <i>HCVF</i>, <i>Representative Samples of Existing Ecosystems and Ecological Networks</i></p>	<p>6.2.11.1. Documents regarding protected sites. 6.2.11.2. Maps. 6.2.11.3. Field inspection</p>
<p>6.2.12. To ensure the protection of <i>habitats of rare, threatened, and endangered species</i> within the forest area being certified, the enterprise shall establish new <i>protected sites</i> with legal status (<i>protective forests, OZU or protected areas</i>) or such areas are set aside voluntarily.</p> <p>Note: For voluntarily set aside areas, the enterprise shall provide documented evidence of its efforts aimed at granting legal status to such areas (e.g. correspondence with authorities in charge or support to efforts by other organizations)</p>	<p>6.2.12.1. Evidence of establishment of protected sites, documented proposals on their establishment and written commitments of voluntary conservation efforts approved by enterprise management, including maps. 6.2.12.2. Evidences of communication and minutes of meetings with stakeholders. 6.2.12.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.2.12.4. Interviews with enterprise specialists. 6.2.12.5. Interviews with stakeholders</p>
<p>6.2.13. The staff are aware of materials about <i>rare, threatened, and endangered species</i> and the list of game species occurring within the forest area being certified, their typical <i>key habitats</i> as well as measures on protection of these species</p>	<p>6.2.13.1. Lists of rare, threatened, and endangered species and game species occurring in the area, their key habitats and protection measures. 6.2.13.2. Records of meetings and field trainings for staff (programs of courses, lists of participants). 6.2.13.3. Interviews with staff. 6.2.13.4. Interviews with enterprise managers</p>
<p>6.2.14. The enterprise in cooperation with relevant agencies and other <i>stakeholders</i> implements measures to control hunting and fishing at the area</p>	<p>6.2.14.1. Records of measures undertaken to protect animals and control hunting and fishing. 6.2.14.2. Interviews with fishery and hunting inspectors. 6.2.14.3. Interviews with enterprise managers. 6.2.14.4. Field inspection</p>

Criteria 6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including:	
a) Forest regeneration and succession,	
b) Genetic species, and ecosystem diversity,	
c) Natural cycles that affect the productivity of the forest ecosystem	
Indicators	Means of verification
<p>6.3.1. The main ecological parameters of the forest condition within the area being certified shall be identified, such as:</p> <ul style="list-style-type: none"> • forested area; • stand composition and age distribution; • areas of burnt and dead stands; • stand distribution according to management targets (protective, exploitation, and reserve); • the share of stands with tree species prohibited for harvest by federal and regional regulations; • the share of forest communities considered to be rare in the area. <p>Note: In the taiga zone of European Russia rare forests types can be stands with noticeable admixture of noble broadleaf species (oak, elm, ash, linden, maple, and alike), Siberian larch, Siberian pine, black alder, and spruce stands with tall herbaceous plants. See further <i>Annexes B, C and E</i></p>	<p>6.3.1.1. Lists of tree species prohibited for harvest by federal and regional regulations and rare forest communities.</p> <p>6.3.1.2. Data on the main ecological parameters of the forest condition.</p> <p>6.3.1.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan)</p>
<p>6.3.2. Data on changes in the ecological parameters of the forest condition consistent with 6.3.1 are regularly collected</p>	<p>6.3.2.1. Forest inventory materials.</p> <p>6.3.2.2. Records of annually collected data</p>
<p>6.3.3. <i>Degraded areas</i> within the forest area being certified (which degraded as a result of management activities before the beginning of <i>certification</i>) – long unregenerated <i>clearcuts</i> and burnt areas, areas with abnormally high frequency of fire occurrence, eroded areas, mining areas, unauthorized waste disposal sites, other sources of adverse environmental impact) – have been identified</p>	<p>6.3.3.1. List of areas degraded by management activities.</p> <p>6.3.3.2. Maps.</p> <p>6.3.3.3. Inventory of forest areas exempted from the forest fund (for the district level forest management administration unit)</p>
<p>6.3.4. The enterprise implements measures (reforestation and reclamation) to restore forest areas degraded by management activities</p>	<p>6.3.4.1. Register of records of restoration and reclamation activities of degraded forest areas.</p> <p>6.3.4.2. Field inspection</p>
<p>6.3.5. <i>Forest management operations mimic natural dynamics</i> of a particular forest.</p> <p>Note: Harvesting shall not mimic catastrophic disturbances of low frequency (e.g. catastrophic stand-replacing fires) (see <i>Annex C, section Preservation and Maintenance of Ecological Functions and Values during Harvesting</i>)</p>	<p>6.3.5.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>6.3.5.2. Interviews with enterprise specialists and forest surveyors.</p> <p>6.3.5.3. Rationale for harvesting and silvicultural techniques.</p> <p>6.3.5.4. Field inspection</p>
<p>6.3.6. In <i>harvest areas</i> design, the enterprise considers natural landscape borders</p>	<p>6.3.6.1. Interviews with enterprise specialists and forest surveyors.</p> <p>6.3.6.2. Harvesting documents (forest declaration, harvesting permits or orders).</p> <p>6.3.6.3. Field inspection</p>

<p>6.3.7. The enterprise has a program to switch over from large-size <i>clearcuts</i> to <i>narrow clear-strip cuts</i>, <i>shelterwood (multistage) cuts</i> and/or <i>selection cuts</i> in relevant forest types.</p> <p>Note: see further <i>Annex C</i>, section <i>Preservation and Maintenance of Ecological Functions and Values during Harvesting</i></p>	<p>6.3.7.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>6.3.7.2. Program to switch over to narrow clear-strip cuts, shelterwood (multistage) cuts and/or selection cuts.</p> <p>6.3.7.3. Share of harvesting without the use of clearcuts.</p> <p>6.3.7.4. Interviews with stakeholders</p>
<p>6.3.8. The program consistent with 6.3.7 is being implemented</p>	<p>6.3.8.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>6.3.8.2. Program to switch over to narrow clear-strip cuts, shelterwood (multistage) cuts and/or selection cuts.</p> <p>6.3.8.3. Document on implementation of the program.</p> <p>6.3.8.4. Share of harvesting without the use of clearcuts.</p> <p>6.3.8.5. Field inspection</p>
<p>6.3.9. The following windthrow resistant <i>key stand elements</i> (residual trees and their groups) shall be completely or partly left during timber harvesting:</p> <ul style="list-style-type: none"> • old trees of <i>non-target species</i>; • large trees with holes; • trees with large bird nests; • veteran trees whose age noticeably exceeds the average age of the main canopy; and • tree species considered to be rare in this area; <p>Note: Rare are species of trees, shrubs, and lianas prohibited for harvest at the federal or regional level as well as viable trees of valuable species (oak, beech, ash, linden, Siberian and Korean pines etc.) occurring at the limit of their natural ranges (see also 6.2.2). See <i>Annex C</i>, section <i>Preservation and Maintenance of Ecological Functions and Values during Harvesting</i>)</p>	<p>6.3.9.1. Red data books, list of rare tree species, list of key stand elements, Timber Harvesting Regulations (2007) and operating guidelines.</p> <p>6.3.9.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan).</p> <p>6.3.9.3. Harvesting documents (forest declaration, harvesting permits or orders), including maps.</p> <p>6.3.9.4. Interviews with staff.</p> <p>6.3.9.5. Field inspection</p>

<p>6.3.10. For survival of species dependant on deadwood, during harvesting (including salvage logging) at least the following <i>key stand elements</i> that do not threaten forest health and future <i>forest regeneration</i> shall be retained:</p> <ul style="list-style-type: none"> • windthrow resistant dying trees and snags located at the distance from roads, landings and such trees left within clumps and groups; • hanging and dying trees and snags greater than 30–40 cm in a diameter that create a safety hazard at forestry operations shall be cut down and left as deadwood; • high stumps of natural origin; • large down deadwood, especially greater than 30–40 cm in a diameter; and • large slash residues. <p>Note: If technically feasible (e.g. timber harvesters are used), dangerous trees should be felled at the height of 4–6 m above the ground, leaving high stumps. See also <i>Annex C, section Preservation and Maintenance of Ecological Functions and Values during Harvesting</i>)</p>	<p>6.3.10.1. Timber Harvesting Regulations (2007) and operating guidelines. 6.3.10.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.3.10.3. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 6.3.10.4. Interviews with staff. 6.3.10.5. Field inspection</p>
<p>6.3.11. At <i>clearcuts regeneration of target tree species</i> shall be provided by leaving seed trees, their groups and patches with young growth or by adjacent forest walls, while preserving other tree species occurring in the natural forest</p>	<p>6.3.11.1. Timber Harvesting Regulations (2007) and operating guidelines. 6.3.11.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.3.11.3. Records of regeneration monitoring. 6.3.11.4. Field inspection</p>
<p>6.3.12. Not less than 20 seed trees or one group of seed trees per hectare shall be left for <i>natural forest regeneration at clearcuts</i></p>	<p>6.3.12.1. Timber Harvesting Regulations (2007) and operating guidelines. 6.3.12.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.3.12.3. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 6.3.12.4. Interview with staff. 6.3.12.5. Field inspection</p>

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<p>6.3.13. When using <i>clearcuts</i> (as well as after the final cut of <i>shelterwood (multistage) harvesting</i>) greater than 10 ha, the patchiness of a forest landscape shall be preserved by leaving forest strips and clumps (including complex seed clumps and strips) that include rare non-typical forest patches, elements of pristine (old growth) forest as well as the <i>key stand elements</i> consistent with 6.3.9–6.3.12.</p> <p>Note: According to Timber Harvesting Regulations it is permitted to leave compact parts of forest stands, in which harvesting has not been started when they constitute at least 10% of a <i>harvest area</i></p>	<p>6.3.13.1. Timber Harvesting Regulations (2007) and operating guidelines. 6.3.13.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.3.13.3. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 6.3.13.4. Interview with staff. 6.3.13.5. Field inspection</p>
<p>6.3.14. Per each 10 ha of a <i>clearcut</i> at least one forest clump (strip) consistent with 6.3.13 with a diameter (width) not less than 1.5 times exceeding the average height of the tree stand shall be preserved</p>	<p>6.3.14.1. Operating guidelines. 6.3.14.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.3.14.3. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 6.3.14.4. Interview with staff. 6.3.14.5. Field inspection</p>
<p>6.3.15. Slash residues are used to protect soil at skid rows or distributed over a <i>harvest area</i> to improve forest conditions</p>	<p>6.3.15.1. Administrative regulations and operating guidelines. 6.3.15.2. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 6.3.15.3. Field inspection</p>
<p>6.3.16. The enterprise burns or removes slash residues from a <i>harvest area</i> only when this measure is necessary for <i>forest regeneration</i> and fire or <i>pest management</i>.</p> <p>Note: Use of cutting waste see 5.3.2</p>	<p>6.3.16.1. Administrative regulations and operating guidelines. 6.3.16.2. Harvesting documents (forest declaration, harvesting permits or orders), including maps. 6.3.16.3. Field inspection</p>
<p>6.3.17. Artificial <i>regeneration</i> is used only when natural <i>forest regeneration</i> is failed, complicated or does not meet management objectives or permitted <i>regeneration</i> timelines</p>	<p>6.3.17.1. Administrative regulations and operating guidelines. 6.3.17.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.3.17.3. Records of regeneration monitoring. 6.3.17.4. Field inspection</p>
<p>6.3.18. Staff are familiar with measures aimed at preservation and maintenance of ecological functions and conservation values of forest (see 6.3.5–6.3.17) and are trained to their practical implementation.</p> <p>Note: See also 3.3.6, 6.2.13, and 6.5.2</p>	<p>6.3.18.1. Administrative regulations and operating guidelines and their accessibility to staff. 6.3.18.2. Evidence of training programs, extension courses, internships etc. 6.3.18.3. Interview with enterprise specialists. 6.3.18.4. Interview with staff</p>

Criteria 6.4. Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources	
Indicators	Means of verification
<p>6.4.1. The enterprise shall establish a network of <i>representative samples of existing ecosystems</i> within the forest area being certified, which provides preservation of the diversity of landscapes, ecosystems, habitat types, and local flora and fauna.</p> <p>Notes: <i>Representative samples of existing ecosystems</i> may include existing and candidate protected areas, <i>protective forests</i>, relatively large <i>OZU</i>, including candidate areas for ecological networks, and voluntarily set aside forest areas. See further <i>Annex E</i>, section <i>HCVF</i>, <i>Representative Samples of Existing Ecosystems and Ecological Networks</i></p>	<p>6.4.1.1. List of types of representative samples of existing ecosystems.</p> <p>6.4.1.2. Forest inventory materials, other materials with maps.</p> <p>6.4.1.3. Interviews with enterprise specialists</p>
<p>6.4.2. The gap analysis shall assess to what extent the existing <i>protected sites</i> network includes all types of ecosystems and landscapes occurring within the forest area being certified (i.e. is representative)</p>	<p>6.4.2.1. Forest inventory materials.</p> <p>6.4.2.2. Analytic materials with maps.</p> <p>6.4.2.3. Interviews with enterprise specialists</p>
<p>6.4.3. The gap analysis shall assess to what extent the existing <i>protected sites</i> network provides protection of regionally and locally <i>rare and threatened types of ecosystems</i> and landscapes</p>	<p>6.4.3.1. Forest inventory materials.</p> <p>6.4.3.2. Analytic materials with maps.</p> <p>6.4.3.3. Interviews with enterprise specialists</p>
<p>6.4.4. The gap analysis shall assess to what extent the existing <i>protected sites</i> network provides species settling and migration (connectivity)</p>	<p>6.4.4.1. Forest inventory materials.</p> <p>6.4.4.2. Analytic materials with maps.</p> <p>6.4.4.3. Interviews with enterprise specialists</p>
<p>6.4.5. Additional <i>representative samples of existing ecosystems</i> shall be identified to fill the gaps in the <i>protected sites</i> network at a landscape level (district level forest management administration unit)</p>	<p>6.4.5.1. Results of the gap analysis of the protected sites network.</p> <p>6.4.5.2. Evidence of research or inventories.</p> <p>6.4.5.3. Evidence of communication with stakeholders (NGOs, forest surveyors, conservation biologists, indigenous peoples representatives)</p>
<p>6.4.6. Identified <i>representative samples of existing ecosystems</i> are described and mapped</p>	<p>6.4.6.1. Site descriptions.</p> <p>6.4.6.2. Maps</p>
<p>6.4.7. Identified <i>representative samples of existing ecosystems</i> within the area of on-going forestry operations and road construction shall be marked on site with “Stop!” signs and restricting road signs</p>	<p>6.4.7.1. Maps.</p> <p>6.4.7.2. Interviews with enterprise specialists.</p> <p>6.4.7.3. Field inspection</p>
<p>6.4.8. Identified <i>representative samples of existing ecosystems</i> shall have management regimes sufficient to ensure their protection or maintenance.</p> <p>Note: For voluntarily set aside areas, the enterprise shall provide documented evidence of its efforts aimed at granting such areas a legal status (e.g. correspondence with relevant authorities or support to efforts by other organizations)</p>	<p>6.4.8.1. Site descriptions.</p> <p>6.4.8.2. Evidence of communication with forest inventory enterprises and forest management administration.</p> <p>6.4.8.3. Interviews with stakeholders.</p> <p>6.4.8.4. Field inspection</p>
<p>6.4.9. The management restrictions (regimes) in respective areas are being observed</p>	<p>6.4.9.1. Site descriptions.</p> <p>6.4.9.2. Harvesting documents (forest declarations, harvesting permits or orders).</p> <p>6.4.9.3. Interviews with stakeholders.</p> <p>6.4.9.4. Field inspection</p>

Criteria 6.5. Written guidelines shall be prepared and implemented to: control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources	
Indicators	Means of verification
6.5.1. The enterprise has written operating guidelines for forest workers aimed at reducing the risk of degradation of forest, soil and water resources; they describe practices that shall be avoided or minimized during harvesting and other <i>silvicultural operations</i> and construction of forest roads and hydrotechnical installations in consistence with requirements of 6.5.3–6.5.10	6.5.1.1. Administrative regulations and operating guidelines. 6.5.1.2. Interviews with enterprise specialists
6.5.2. Staff are aware of the operating guidelines consistent with 6.5.1 and operating guidelines and are trained to implement them	6.5.2.1. Administrative regulations and operating guidelines and their availability to staff. 6.5.2.2. Documentation of training programs, extension courses, internships. 6.5.2.3. Interviews with enterprise specialists. 6.5.2.4. Interviews with staff
6.5.3. The choice of technique and timing of harvesting and other <i>silvicultural operations</i> shall take into account forest type and soil conditions at the <i>harvest area</i> in order to minimize the impact on soils due to mechanical damage, compaction, paludification, and erosion development. Note: This may be achieved by suspending harvesting, skidding, and removal of timber from forest in periods when soil is wet; by harvesting of timber on moist and/or rich loamy and clayey soils only in winter; by restricting the number of skid rows and landings on <i>harvesting areas</i> and optimization of the areal extent of them	6.5.3.1. Administrative regulations and operating guidelines. 6.5.3.2. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 6.5.3.3. Inspection records of harvest area. 6.5.3.4. Interviews with enterprise specialists. 6.5.3.5. Field inspection
6.5.4. Timber hauling along lakes, streams, including beds of small rivers and streams as well as ephemeral streams, shall be prohibited	6.5.4.1. Administrative regulations and operating guidelines. 6.5.4.2. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 6.5.4.3. Field inspection
6.5.5. Fuel and oil storage and machinery or vehicle parking are prohibited within <i>water protective zones</i> and on the ice of streams and pools	6.5.5.1. Administrative regulations and operating guidelines. 6.5.5.2. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 6.5.5.3. Interviews with staff. 6.5.5.4. Field inspection
6.5.6. Construction and use of the drainage system of forest roads excludes paludification and permanent rise of water table in soils	6.5.6.1. Administrative regulations and operating guidelines. 6.5.6.2. Design of roads and hydrotechnical constructions, including maps. 6.5.6.3. Interviews with enterprise specialists. 6.5.6.4. Field inspection

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<p>6.5.7. Construction of forest roads and bridges shall not disturb <i>habitats critical</i> for lifecycles of animals (in particular by avoiding sensitive areas, restricting number of water crossings, no water-crossing construction during fish breeding period, and preserving natural ways of animal migration)</p>	<p>6.5.7.1. Administrative regulations and operating guidelines. 6.5.7.2. Forest inventory materials with maps. 6.5.7.3. Design of roads and bridges with maps. 6.5.7.4. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 6.5.7.5. Interviews with enterprise specialists. 6.5.7.6. Interviews with hunting and fishery inspectors. 6.5.7.7. Field inspection</p>
<p>6.5.8. Harvesting, other <i>silvicultural operations</i>, construction of forest roads and hydro-technical installations (including bridges), and the use of machinery and equipment shall not lead to pollution of nearby lakes, ponds, and adjacent <i>water protective zones</i></p>	<p>6.5.8.1. Administrative regulations and operating guidelines. 6.5.8.2. Forest inventory materials with maps. 6.5.8.3. Interviews with staff. 6.5.8.4. Interviews with local communities. 6.5.8.5. Interviews with protection and/or enforcement agencies in the sphere of management of natural resources. 6.5.8.6. Field inspection</p>
<p>6.5.9. Harvesting, other <i>silvicultural operations</i>, construction of forest roads and hydro-technical installations shall not violate management restrictions (regime) in <i>protected sites</i></p>	<p>6.5.9.1. Administrative regulations and operating guidelines. 6.5.9.2. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 6.5.9.3. Materials on protected sites with maps. 6.5.9.4. Interviews with enterprise specialists. 6.5.9.5. Field inspection</p>
<p>6.5.10. Technological processes, machinery and equipment are used in a way to minimize damage of residual trees at <i>harvest areas</i> as well as of trees at adjacent forest patches</p>	<p>6.5.10.1. Administrative regulations and operating guidelines. 6.5.10.2. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 6.5.10.3. Interviews with enterprise specialists. 6.5.10.4. Field inspection</p>

<p>Criteria 6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks</p>	
Indicators	Means of verification
<p>6.6.1. The enterprise has a strategy for the use of <i>biological and chemical control methods of pest management</i>.</p> <p>Note: Requirements to enterprise's activity in this respect are described in <i>FSC Pesticides Policy: Guidance on Implementation FSC-GUI-30-001 VERSION 2-0 EN</i></p>	<p>6.6.1.1. Evidence of compliance with <i>FSC Pesticides Policy FSC-GUI-30-001 VERSION 2-0 EN</i>. 6.6.1.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 6.6.1.3. Strategy for the use of biological and chemical control methods of pest management. 6.6.1.4. Dynamics of area damaged by pests. 6.6.1.5. Interviews with enterprise specialists</p>
<p>6.6.2. According to the strategy <i>biological control methods of pest management</i> shall be given preference in use over <i>chemical control methods</i></p>	<p>6.6.2.1. Strategy for the use of biological and chemical control methods of pest management. 6.6.2.2. Interviews with enterprise specialists</p>
<p>6.6.3. The strategy shall pay special attention to early detection of <i>pest</i> outbreaks and preventive measures</p>	<p>6.6.3.1. Strategy for the use of biological and chemical control methods of pest management. 6.6.3.2. Interviews with enterprise specialists</p>
<p>6.6.4. Highly hazardous <i>pesticides</i> (chemicals used to control <i>pests</i>) shall not be used, namely:</p> <ul style="list-style-type: none"> • World Health Organization Type 1A and 1B and chlorinated hydrocarbon <i>pesticides</i>; • chlorinated hydrocarbon <i>pesticides</i>; • <i>pesticides</i> that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; and • any <i>pesticides</i> banned by international agreement. <p>Note: Further details on the list of ingredients of highly hazardous <i>pesticides</i> and their criteria see <i>FSC Pesticides Policy: Guidance on Implementation FSC-GUI-30-001 VERSION 2-0 EN (Annexes I and II)</i>. In specific circumstances FSC may permit the use of highly hazardous <i>pesticides</i> from this list within the certified forest for a 5-year period with a possibility to extend this period. In order to do this the <i>certification</i> body shall follow the procedure described in the FSC Policy <i>FSC-PRO-01-004 Processing Applications for Temporary Derogations to FSC Pesticides Policy</i></p>	<p>6.6.4.1. Availability of the FSC policies <i>FSC-GUI-30-001 VERSION 2-0 EN</i> and <i>FSC-PRO-01-004</i>. 6.6.4.2. Regulations on pesticide administration. 6.6.4.3. Register of records of the use of pesticides. 6.6.4.4. Interviews with enterprise specialists. 6.6.4.5. Field inspection</p>
<p>6.6.5. <i>Pesticides</i> are used only if other non-chemical methods of <i>pest management</i> have appeared to be ineffective</p>	<p>6.6.5.1. Register of records of the use of chemical and biological methods of pest management. 6.6.5.2. Dynamics of area damaged by pests. 6.6.5.3. Interviews with enterprise specialists. 6.6.5.4. Field inspection</p>

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6.6.6. <i>Pesticides</i> are used only by authorization of a relevant governmental agency and according to administrative regulations for their use	6.6.6.1. List of permitted pesticides. 6.6.6.2. Environmental impact assessment (OVOS) and/or ekologicheskaya ekspertiza. 6.6.6.3. Regulations on pesticide administration. 6.6.6.4. Register of records of the use of pesticides. 6.6.6.5. Interviews with enterprise specialists
6.6.7. Use of fertilizers in forestry is allowed only in <i>plantations</i> , forest tree nurseries, and on reforesting bare lands (e.g. abandoned agricultural fields) as well as when reclaiming <i>degraded</i> non-forest lands	6.6.7.1. Documentation, including the rationale for the use of fertilizers. 6.6.7.2. Interviews with enterprise specialists. 6.6.7.3. Field inspection
6.6.8. The enterprise implements health and safety regulations for the use of chemicals (in particular providing necessary training and medical inspection of workers)	6.6.8.1. Health and safety regulations. 6.6.8.2. Register of records of health and safety instructions. 6.6.8.3. Register of records of medical inspections. 6.6.8.4. Interviews with staff. 6.6.8.5. Field inspection
<i>Criteria 6.7. Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations</i>	
Indicators	Means of verification
6.7.1. Chemicals, containers, liquid and solid non-organic wastes, including fuel, oil and ignitable liquids are stored and managed in line with applicable administrative regulations	6.7.1.1. Administrative regulations and operating guidelines for waste management. 6.7.1.2. Records of storage and management of chemical wastes and containers. 6.7.1.3. Interviews with enterprise specialists. 6.7.1.4. Field inspection
6.7.2. Refilling and oil replacement in chain-saws, machinery and equipment are done in specially dedicated places, where the risk of environmental pollution is low	6.7.2.1. Machinery and equipment instructions. 6.7.2.2. Interviews with enterprise specialists. 6.7.2.3. Field inspection
6.7.3. Soil and water are protected from pollution during storage and refilling with fuel and oil	6.7.3.1. Operating guidelines for waste management. 6.7.3.2. Interviews with enterprise specialists. 6.7.3.3. Field inspection
6.7.4. Places for storage and disposal of chemicals, fuel and oil, and waste are equipped in consistence with applicable health and safety regulations	6.7.4.1. Health and safety regulations. 6.7.4.2. Operating guidelines for waste management. 6.7.4.3. Interviews with enterprise specialists. 6.7.4.4. Field inspection
6.7.5. Industrial and household waste is managed in consistence with applicable regulations	6.7.5.1. Operating guidelines for waste management. 6.7.5.2. Interviews with enterprise specialists. 6.7.5.3. Field inspection
6.7.6. Waste from machinery and equipment is removed from the management area after completion of works	6.7.6.1. Operating guidelines for waste management. 6.7.6.2. Interviews with enterprise specialists. 6.7.6.3. Field inspection
6.7.7. When it is economically and technically justified, preference in use for machinery and equipment is given to environment friendly fuels and oils	6.7.7.1. Evidence of technical feasibility of acquiring and prices for environment friendly fuels and oils. 6.7.7.2. Specification of fuels and oils. 6.7.7.3. Machinery and equipment instructions. 6.7.7.4. Interviews with enterprise specialists. 6.7.7.5. Field inspection

Criteria 6.8. Use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited	
Indicators	Means of verification
<p>6.8.1. The application of organisms (entomophagous insects) as <i>biological control agents</i> is only possible when the inefficiency of other methods of non-chemical <i>pest management</i> is scientifically justified.</p> <p>Note: The use of <i>biological control agents</i> has some advantage over the use of <i>pesticides</i>. However, in some cases it may lead to adverse ecological implications, especially when <i>exotic</i> entomophagous insects are used</p>	<p>6.8.1.1. Plans of forest protection activities. 6.8.1.2. List of used biological control agents. 6.8.1.3. Register of records of the use of biological control agents. 6.8.1.4. Rationale for the use of biological control agents. 6.8.1.5. Interviews with enterprise specialists. 6.8.1.6. Field inspection</p>
<p>6.8.2. <i>Biological control agents</i> are used in consistence with applicable administrative regulations</p>	<p>6.8.2.1. Administrative regulations and operating guidelines for use of biological control agents. 6.8.2.2. Plans of forest protection activities. 6.8.2.3. Register of records of the use of biological control agents. 6.8.2.4. Rationale for the use of biological control agents. 6.8.2.5. Report on the use of biological control agents. 6.8.2.6. Interviews with enterprise specialists. 6.8.2.7. Field inspection</p>
<p>6.8.3. Genetically modified organisms are not used</p>	<p>6.8.3.1. Interviews with enterprise specialists. 6.8.3.2. Plans of forest protection activities. 6.8.3.3. Interviews with representatives of environment protection agencies</p>
Criteria 6.9. The use of exotic species⁹ shall be carefully controlled and actively monitored to avoid adverse ecological impacts	
<p>6.9.1. The use of <i>exotic plants</i> is only allowed for maintenance of man-made stands consisting of introduced species, which are of high historical and cultural value (e.g. larch stands), for urban gardening and in <i>plantations</i> (see Principle 10)</p>	<p>6.9.1.1. Forest inventory and historical materials, documents on planted forests. 6.9.1.2. Interviews with enterprise specialists. 6.9.1.3. Field inspection</p>
<p>6.9.2. All available scientific information and practical experience with respect to ecology and environmental risks associated with the use of <i>exotic species</i> occurring within the forest area being certified in local or close natural conditions are collected.</p> <p>Note: This applies to all <i>exotic</i> trees and shrubs like Manitoba maple (<i>Acer negundo</i>) and especially aggressive herbaceous species like hogweed (<i>Hercleum sosnowskyi</i>), whose presence within the area is not associated with the applicant's activity, as well as to <i>exotic species</i>, which are to be used in the <i>plantation</i> (see 10.8.3)</p>	<p>6.9.2.1. List of inytroduced species occurring within the area. 6.9.2.2. Scientific publications and practical experience on ecology and use of the exotic species. 6.9.2.3. Evidence of communication and consultations with specialists in this sphere. 6.9.2.4. Interviews with enterprise specialists</p>
<p>6.9.3. If <i>exotic species</i> consistent with 6.9.2 occur within the forest area being certified, the enterprise shall undertake measures to prevent uncontrolled spread of them</p>	<p>6.9.3.1. Documents on planted forests of exotic species. 6.9.3.2. Records of exotic species monitoring. 6.9.3.3. Interviews with enterprise specialists. 6.9.3.4. Field inspection</p>

⁹ This Criterion does not apply to *reintroduced species*, i.e. species that historically occurred at the area (e.g. noble broadleaf species that have disappeared from some regions of European Russia) and for which special restoration measures are used.

<p>Criteria 6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:</p> <p>j) entails a very limited portion of the forest management unit; and</p> <p>j) does not occur on high conservation value forest areas; and</p> <p>j) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit</p>	
Indicators	Means of verification
<p>6.10.1. Conversion of forests to <i>plantations</i> is only permitted when it occurs at less than 5% of forests within the area being certified.</p> <p>Note: the establishment of a <i>plantation</i> shall bring sustainable conservation benefits to the forest in this area as a whole in <i>long term</i> (e.g. it will significantly reduce harvesting levels in natural forests)</p>	<p>6.10.1.1. Rationale for establishment of plantations.</p> <p>6.10.1.2. Materials of OVOS and/or EE.</p> <p>6.10.1.3. Interviews with enterprise managers.</p> <p>6.10.1.4. Interviews with stakeholders</p>
<p>6.10.2. <i>Conversion of forest lands to other land categories</i>, whose function cannot guarantee preservation of forest cover in the <i>long term</i> (except construction of roads required for access and local minerals pits), is only permitted when it corresponds to plans for development of the area (housing, road construction etc.) approved at the federal, regional or municipal levels and is supported by <i>local communities</i>.</p> <p>Note: This indicator does not apply to lands with <i>HCVF</i>, see 6.10.4 and 6.10.5</p>	<p>6.10.2.1. Rationale for conversion of forest lands.</p> <p>6.10.2.2. Evidence of the legality of conversion.</p> <p>6.10.2.3. Interviews with enterprise managers.</p> <p>6.10.2.4. Interviews with local communities.</p> <p>6.10.2.5. Interviews with local authorities</p>
<p>6.10.3. The enterprise shall not convert <i>high conservation value forests</i> to <i>plantations</i></p>	<p>6.10.3.1. Completed assessment of Principle 9.</p> <p>6.10.3.2. Maps of <i>HCVF</i>.</p> <p>6.10.3.3. Interviews with enterprise managers.</p> <p>6.10.3.4. Interviews with stakeholders</p>
<p>6.10.4. The enterprise shall not initiate <i>conversion of HCVF to lands of other categories</i>, whose function cannot guarantee preservation of forest cover in <i>long term</i> (except construction of roads required for access)</p>	<p>6.10.4.1. Rationale for conversion of forest lands.</p> <p>6.10.4.2. Documents confirming the legality of conversion.</p> <p>6.10.4.3. Maps showing location of <i>HCVF</i>.</p> <p>6.10.4.4. Interviews with enterprise managers.</p> <p>6.10.4.5. Interviews with stakeholders</p>
<p>6.10.5. The enterprise undertakes efforts to prevent conversion of <i>HCFV</i> from occurring, when it corresponds to plans of development of the area (housing, road construction etc.) approved at the federal, regional or municipal levels, especially when it is not supported by <i>local communities</i></p>	<p>6.10.5.1. Rationale for conversion of forest lands.</p> <p>6.10.5.2. Documents confirming the legality of conversion.</p> <p>6.10.5.3. Evidence of communication, meeting minutes.</p> <p>6.10.5.4. Interviews with enterprise managers.</p> <p>6.10.5.5. Interviews with local authorities.</p> <p>6.10.5.6. Interviews with local communities</p>

PRINCIPLE 7: MANAGEMENT PLAN

A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated

<p><i>Criteria 7.1. The management plan and supporting documents shall provide:</i></p> <p><i>b) Management objectives;</i></p> <p><i>b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands;</i></p> <p><i>b) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories;</i></p> <p><i>b) Rationale for rate of annual harvest and species selection;</i></p> <p><i>b) Provisions for monitoring of forest growth and dynamics;</i></p> <p><i>b) Environmental safeguards based on environmental assessments;</i></p> <p><i>b) Plans for the identification and protection of rare, threatened and endangered species;</i></p> <p><i>b) Maps describing the forest resource base including protected areas, planned management activities and land ownership;</i></p> <p><i>b) Description and justification of harvesting techniques and equipment to be used</i></p>	
Indicators	Means of verification
<p>7.1.1. The <i>forest management plan</i> formulates <i>long-term</i> objectives of <i>forest management</i> that cover environmental protection, silvicultural, social and economic considerations for a <i>rotation period</i> and describes their implementation methods for the next 40 years or at least the duration of lease regarding the following aspects:</p> <ul style="list-style-type: none"> • forest production; • silvicultural system, including timber harvesting and <i>forest regeneration</i> techniques; • biodiversity conservation; • conservation of forest ecosystem (water and soil resources); • socio-economic benefits for population, including the use of forest for recreation, collection of berries and mushrooms, hunting and fishing; • protection of sites of special cultural and religious significance; and • public participation in <i>forest management</i> 	<p>7.1.1.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials.</p> <p>7.1.1.2. Interviews with enterprise managers.</p> <p>7.1.1.3. Interviews with enterprise specialists</p>
<p>7.1.2. The <i>forest management plan</i> describes forest resources (forest types, species and age composition, growing stock) of the forest area being certified</p>	<p>7.1.2.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials.</p> <p>7.1.2.2. Maps</p>
<p>7.1.3. The <i>forest management plan</i> contains general description of natural conditions (geography, geology, hydrology, soil, flora and fauna), including environmental limitations of the forest area being certified</p>	<p>7.1.3.1. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials.</p> <p>7.1.3.2. Maps</p>

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<p>7.1.4. The <i>forest management plan</i> describes the use and ownership status of land and forest resources and a profile of adjacent lands, including peculiarities of the use of natural resources</p>	<p>7.1.4.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.4.2. Maps</p>
<p>7.1.5. The <i>forest management plan</i> describes socio-economic conditions of enterprise activity (including those of the enterprise and settlements within or adjacent to the forest area being certified), taking into account 4.4.5</p>	<p>7.1.5.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 7.1.5.2. Materials of socio-economic assessments of impact. 7.1.5.3. Maps</p>
<p>7.1.6. The <i>forest management plan</i> provides rationale for the silvicultural and/or other management systems of the use of forest resources consistent with Principle 6</p>	<p>7.1.6.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.6.2. Interviews with enterprise specialists</p>
<p>7.1.7. The <i>forest management plan</i> provides rationale for the <i>forest regeneration</i> system consistent with Principle 6</p>	<p>7.1.7.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.7.2. Interviews with enterprise specialists</p>
<p>7.1.8. The <i>forest management plan</i> provides rationale for the system of <i>pest management</i> consistent with Principle 6</p>	<p>7.1.8.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.8.2. Interviews with enterprise specialists</p>
<p>7.1.9. The <i>forest management plan</i> provides rationale for the forest protection system consistent with Principle 6</p>	<p>7.1.9.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.9.2. Interviews with enterprise specialists</p>
<p>7.1.10. The <i>forest management plan</i> provides rationale for <i>annual timber removals (annual allowable cut)</i> consistent with Principle 6</p>	<p>7.1.10.1. Regulations on norms of forest use. 7.1.10.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.10.3. Calculations of annual timber removals</p>
<p>7.1.11. The <i>forest management plan</i> describes the system for monitoring of forest growth and dynamics consistent with Principles 6 and 8</p>	<p>7.1.11.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.11.2. Interviews with enterprise specialists. 7.1.11.3. Forest account materials</p>
<p>7.1.12. The <i>forest management plan</i> describes the system of fire management</p>	<p>7.1.12.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.12.2. Lease agreement</p>
<p>7.1.13. The <i>forest management plan</i> describes how results of the environmental impact assessment at the landscape level associated with the presence of <i>HCVF, representative samples of existing ecosystems, habitats of rare, threatened, and endangered species and other key habitats</i> (see 6.2 and 6.4), and sites of special significance for <i>local people</i> with regard to recreation, cultural and religious life, hunting, fishing, and the use of other non-timber forest products are incorporated</p>	<p>7.1.13.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.13.2. Maps</p>

<p>7.1.14. The <i>forest management plan</i> describes how results of the environmental impact assessment of <i>forest management</i> at the stand level (conservation of biodiversity, forest environment, non-timber forest resources, soil and water resources) consistent with 6.1 are incorporated</p>	<p>7.1.14.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.14.2. Interviews with enterprise specialists</p>
<p>7.1.15. The <i>forest management plan</i> describes plans for identification and protection of <i>HCVF, representative samples of existing ecosystems, habitats of rare, threatened, and endangered species, and other key habitats</i> (see 6.2 and 6.4)</p>	<p>7.1.15.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.15.2. List of measures to identify and protect HCVF, representative samples of existing ecosystems, habitats of rare, threatened, and endangered species, and other key habitats. 7.1.15.3. Maps</p>
<p>7.1.16. The <i>forest management plan</i> contains maps showing forest resource base</p>	<p>7.1.16.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.16.2. Maps</p>
<p>7.1.17. The <i>forest management plan</i> contains maps showing relative position and correspondence of different types of <i>protected sites</i>, including protected areas, <i>representative samples of existing ecosystems, and HCVF</i> (see also 6.4 and 9.1).</p> <p>Note: Various types of <i>protected sites</i> fulfill different functions; therefore they shall be identified separately. However, they may intersect (overlap with) each other. In this case, the <i>forest management plan</i> shall contain information on intersection (overlapping) of <i>HCVF, OZU, protective forests, protected areas</i> (including candidate areas) and <i>representative samples of existing ecosystems</i></p>	<p>7.1.17.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.17.2. Maps, including those of protected areas, representative samples of existing ecosystems and HCVF</p>
<p>7.1.18. The <i>forest management plan</i> contains maps describing planned management activities, including for different types of use and different land users (leaseholders)</p>	<p>7.1.18.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.18.2. Maps</p>
<p>7.1.19. The <i>forest management plan</i> contains description and rationale for the system of harvesting and the use of machinery and equipment, including best available practices that minimize the adverse environmental impact and conserve biodiversity and forest environment in consistence with 6.3 and 6.5</p>	<p>7.1.19.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 7.1.19.2. Interviews with enterprise specialists. 7.1.19.3. Interviews with stakeholders</p>

Criteria 7.2. The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances	
Indicators	Means of verification
7.2.1. The <i>forest management plan</i> is revised as necessary to accommodate operational changes in response to the effect of natural and anthropogenic factors (<i>pest</i> outbreaks, flooding, fires and illegal harvesting)	7.2.1.1. Procedure for revision of operational forest management plan. 7.2.1.2. Reports of monitoring records. 7.2.1.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan) or evidence of modification of forest management plans. 7.2.1.4. Interview with enterprise specialists. 7.2.1.5 Maps
7.2.2. The <i>forest management plan</i> , including the plan for establishment of <i>protected sites</i> (6.2.11), is revised to accommodate operational changes in response to scientific information regarding <i>key habitats</i> (6.2.3, 6.2.6, and 6.2.9) and <i>HCVF</i> (9.3) received from research organizations and other <i>stakeholders</i> as well as to changes in policies and operational guidelines, which require immediate implementation	7.2.2.1. Procedure for revision of operational forest management plan. 7.2.2.2. Materials of surveys, research findings, correspondence, including maps, principal changes in enterprise's policies and operational guidelines. 7.2.2.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan) or evidence of changes to forest management plans. 7.2.2.4. Interview with stakeholders
7.2.3. The <i>forest management plan</i> , including the plan for establishment of <i>protected sites</i> (6.2.11), is revised to accommodate operational changes in response to additional enterprise's commitment agreed with <i>stakeholders</i> with respect to conservation or modification of management restrictions: <ul style="list-style-type: none"> • sites of special significance for <i>local communities</i> regarding the use of forest resources consistent with 2.2.3; • sites of special cultural, ecological, economic or religious significance for <i>indigenous people</i> (3.3.5 and 3.3.7); and • <i>HCVF</i> (9.3) 	7.2.3.1. Procedure for revision of operational forest management plan. 7.2.3.2. Evidence of correspondence, protocols, agreements, including maps. 7.2.3.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan) or evidence of changes to forest management plans. 7.2.3.4. Interview with stakeholders
7.2.4. The <i>forest management plan</i> is regularly revised (not less than once in 5–10 years) to incorporate the results of monitoring of changing environmental, social, and economic circumstances as well as new scientific and technical information consistent with Criterion 8.4	7.2.4.1. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan). 7.2.4.2. Records of monitoring and relevant recommendations (see Criterion 8.2). 7.2.4.3. Evidence of new scientific and technical data collection. 7.2.4.4. List of changes to the forest management plan (e.g. strategy, objectives, tasks and approaches to implementation). 7.2.4.5. Interviews with enterprise specialists

Criteria 7.3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan	
Indicators	Means of verification
7.3.1. Forest workers shall be qualified to perform their duties consistent with implementation of <i>forest management plan</i> (see also 4.1.1, 4.1.2, 4.1.4, and 6.5.2)	7.3.1.1. Job descriptions/duty regulations. 7.3.1.2. Records of training and extension courses (programs of courses, lists of participants). 7.3.1.3. Interview with personnel manager. 7.3.1.4. Interviews with staff. 7.3.1.5. Diplomas, vocational training certificates
7.3.2. Forest workers are trained to extend their professional knowledge and skills not less than once in five years to ensure fulfillment of the <i>forest management plan</i>	7.3.2.1. Records of extension courses (programs of courses, lists of participants). 7.3.2.2. Interview with personnel manager. 7.3.2.3. Interviews with staff
7.3.3. All forest work is supervised depending on the difficulty and importance of the task, by qualified specialists, to ensure fulfillment of the <i>forest management plan</i>	7.3.3.1. Job descriptions/duty regulations. 7.3.3.2. Reports of job supervision. 7.3.3.3. Field inspection
Criteria 7.4. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1	
Indicators	Means of verification
7.4.1. The primary elements of the <i>forest management plan</i> (including those listed in Criterion 7.1) except <i>confidential information</i> are available to public. Note: With respect to 7.1.16 and 7.1.18 <i>confidential</i> can be considered only information, disclosure of which could pose an irreversible threat to valuable natural objects (e.g. location of raptors nests, capercaillie leks etc.), as well as about the sites considered as such by <i>local or indigenous people</i>	7.4.1.1. List of confidential information. 7.4.1.2. Availability of summaries of the forest management plan to public. 7.4.1.3. Interviews with stakeholders
7.4.2. The enterprise has a procedure for handling inquiries by the public about non-confidential information regarding plans of management operations	7.4.2.1. Procedure for delivering non-confidential information. 7.4.2.2. Records of inquiries

PRINCIPLE 8: MONITORING AND ASSESSMENT

Monitoring shall be conducted – appropriate to the scale and intensity of forest management – to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts

<i>Criteria 8.1. The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change</i>	
Indicators	Means of verification
<p>8.1.1. The enterprise has a documented monitoring program, which describes:</p> <ul style="list-style-type: none"> • parameters to be monitored; • the frequency; • procedures; • rationale; and • responsibility for monitoring 	<p>8.1.1.1. List of monitoring parameters. 8.1.1.2. Monitoring program. 8.1.1.3. Monitoring procedures. 8.1.1.4. Interviews with enterprise managers. 8.1.1.5. Interviews with enterprise specialists</p>
<p>8.1.2. The monitoring, considering the scale and intensity of <i>forest management</i> operations as well as the relative complexity and fragility of the affected environment, should assess (see 8.2):</p> <ul style="list-style-type: none"> • the degree to which goals and objectives of management have been achieved; • the degree of fulfillment and deviations from the <i>forest management plan</i>; • unexpected effects of management activities; • social (4.4) and environmental (6.1) impacts of management activities; and • the need to revise the <i>forest management plan</i>. <p>Note: Monitoring for small and medium enterprises could be to a greater degree based on qualitative assessments and data collected by external organizations (governmental agencies, research institutions, non-governmental organizations, and other enterprises). Large private and state-owned enterprises should to a greater degree use quantitative assessments and if necessary initiate and/or support relevant environmental research. If applicable, the enterprise shall use materials of the remote sensing monitoring of the forest use within the <i>forest land</i> performed by the Federal Forestry Agency. Results of the monitoring are available from relevant regional authorities</p>	<p>8.1.2.1. Monitoring program. 8.1.2.2. Monitoring procedures. 8.1.2.3. Monitoring documentation, including remote sensing monitoring</p>
<p>8.1.3. The monitoring program is revised if necessary based on information collected as well as on new sources of data or developments in monitoring technologies, including maps</p>	<p>8.1.3.1. Monitoring program. 8.1.3.2. Proposals to change the monitoring program</p>
<p>8.1.4. The monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change</p>	<p>8.1.4.1. List of monitoring parameters. 8.1.4.2. Monitoring program. 8.1.4.3. Monitoring procedures. 8.1.4.4. Interviews with enterprise managers. 8.1.4.5. Interviews with staff</p>

<p>Criteria 8.2. Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators:</p> <p>c) <i>Yield of all forest products harvested.</i></p> <p>c) <i>Growth rates, regeneration and condition of the forest.</i></p> <p>c) <i>Composition and observed changes in the flora and fauna.</i></p> <p>c) <i>Environmental and social impacts of harvesting and other operations.</i></p> <p>c) <i>Costs, productivity, and efficiency of forest management</i></p>	
Indicators	Means of verification
8.2.1. <i>Forest management</i> includes data collection to monitor the ratio of actual to estimated levels of harvesting of all types	8.2.1.1. Monitoring records and reports. 8.2.1.2. Interviews with stakeholders. 8.2.1.3. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 8.2.1.4. Field inspection
8.2.2. <i>Forest management</i> includes data collection to monitor the ratio of <i>selection</i> and <i>shelterwood (multistage) harvesting to clear-cuts</i> by area, and its dynamics	8.2.2.1. Monitoring and reports records. 8.2.2.2. Field inspection
8.2.3. <i>Forest management</i> includes data collection to monitor the yield of different types of forest products by category	8.2.3.1. Monitoring records and reports. 8.2.3.2. Field inspection
8.2.4. <i>Forest management</i> includes data collection and analysis to monitor the dynamics of the average growth rate (total, by <i>economically accessible forests</i> , and by <i>management units and sections</i>)	8.2.4.1. Monitoring records and reports. 8.2.4.2. Field inspection
8.2.5. <i>Forest management</i> includes data collection and analysis to monitor the rate of <i>forest regeneration</i> , by types and methods	8.2.5.1. Monitoring records and reports. 8.2.5.2. Field inspection
8.2.6. <i>Forest management</i> includes data collection and analysis to monitor the tree species, age and quality of stand	8.2.6.1. Monitoring records and reports. 8.2.6.2. Field inspection
8.2.7. <i>Forest management</i> includes data collection and analysis to monitor the area of <i>protected sites</i> by types	8.2.7.1. Monitoring records and reports. 8.2.7.2. Interviews with stakeholders. 8.2.7.3. Field inspection
8.2.8. <i>Forest management</i> includes data collection and analysis to monitor the scale of operations on wildlife conservation and improvement of respective habitats	8.2.8.1. Monitoring records and reports. 8.2.8.2. Interviews with stakeholders. 8.2.8.3. Field inspection
8.2.9. <i>Forest management</i> includes data collection and analysis to monitor the scale and type of forest protection and conservation measures	8.2.9.1. Monitoring records and reports. 8.2.9.2. Interviews with stakeholders. 8.2.9.3. Field inspection
8.2.10. <i>Forest management</i> includes data collection and analysis to monitor the population dynamics of species of plants, animals, and fungi occurring within the forest area being certified.	8.2.10.1. Monitoring records and reports. 8.2.10.2. Interviews with stakeholders. 8.2.10.3. Field inspection
<p>Note: This does not require collection of information on all species of flora and fauna. It is sufficient to collect data on <i>umbrella</i> or <i>keystone species</i>. The state of their population also reflects the state of many other (linked) species, as well as data on the state of rare, fragile or rich plant communities</p>	

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8.2.11. <i>Forest management</i> includes data collection and analysis to monitor the population dynamics of protected species	8.2.11.1. Monitoring records and reports. 8.2.11.2. Interviews with stakeholders. 8.2.11.3. Field inspection
8.2.12. <i>Forest management</i> includes data collection and analysis to monitor the environmental and social impacts of harvesting and other <i>forest management</i> operations	8.2.12.1. Monitoring records and reports. 8.2.12.2. Interviews with stakeholders. 8.2.12.3. Field inspection
8.2.13. <i>Forest management</i> includes data collection and analysis to monitor the total costs of <i>forest management</i> operations	8.2.13.1. Monitoring records and reports
8.2.14. The enterprise analyzes the efficiency of forestry operations	8.2.14.1. Monitoring records and reports
8.2.15. Results of research and monitoring activities are documented as reports	8.2.15.1. Monitoring records and reports. 8.2.15.2. Research and monitoring reports. 8.2.15.3. Interviews with monitoring staff
8.2.16. Research and monitoring reports contain proposals for changes in the monitoring program, additional research and necessary data collection	8.2.16.1. Monitoring records and reports. 8.2.16.2. Proposed changes in the monitoring program, needs for additional research and data collection. 8.2.16.3. Interviews with monitoring staff
<i>Criteria 8.3. Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the “chain of custody”</i>	
Indicators	Means of verification
8.3.1. The enterprise has a procedure that permits it to trace each forest product from its origin to the point of sale (chain-of-custody)	8.3.1.1. Procedure for tracing product origin
8.3.2. The origin of all certified products is documented	8.3.2.1. Sale documents (invoices, freight notes, orders)
8.3.3. Sale and other relevant documents have a number of chain-of-custody <i>certificate</i>	8.3.3.1. Sale documents (invoices etc.). 8.3.3.2. Specifications. 8.3.3.3. Accompanying documents
8.3.4. The enterprise keeps a track of records on all certified forest products sold, as well as on products sold to the holders of chain-of-custody <i>certificates</i>	8.3.4.1. Sale records. 8.3.4.2. Certified products reports
8.3.5. All certified forest products in the enterprise's possession are easily identifiable because they have marks or labels and/or are stored separately from other products	8.3.5.1. Marks or labels on certified wood products in the yard. 8.3.5.2. Separate storage for certified and non-certified wood. 8.3.5.3. Field inspection

Criteria 8.4. The results of monitoring shall be incorporated into the implementation and revision of the management plan	
Indicators	Means of verification
8.4.1. Discrepancies between actual and expected results (plans, projections, anticipated impacts) of management activities or natural development of ecosystems discovered during monitoring are considered when implementing the <i>forest management plan</i>	8.4.1.1. Monitoring reports. 8.4.1.2. Plan of harvesting and other management activities. 8.4.1.3. Interviews with enterprise managers
8.4.2. Discrepancies consistent with 8.4.1 are taken into account when revising the <i>forest management plan</i> , policies and operating procedures (see also criteria 7.2 and 8.2)	8.4.2.1. Monitoring reports. 8.4.2.2. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 8.4.2.3. Policies and operating procedures. 8.4.2.4. Interviews with enterprise managers
Criteria 8.5. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2	
Indicators	Means of verification
8.5.1. A summary of the monitoring results of parameters consistent with 8.2, except <i>confidential information</i> , is available to the public	8.5.1.1. List of confidential information. 8.5.1.2. Publicly available the summary of the results of forest management monitoring. 8.5.1.3. Interviews with stakeholders
8.5.2. The enterprise has a procedure of disclosure of non-confidential information regarding monitoring results to public	8.5.2.1. Procedure of disclosure of non-confidential information. 8.5.2.2. Register of requests

PRINCIPLE 9: MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS

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

<i>Criteria 9.1. Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management</i>	
Indicators	Means of verification
<p>9.1.1. It is determined whether the forest area being certified is a territory (ecoregion) characterized by significant biodiversity of global or national importance and/or contains other objects with high biodiversity (protected areas, important bird areas, wetlands of international importance etc.).</p> <p>Note: See further <i>Annex E</i>, section <i>Categories of HCVF</i></p>	<p>9.1.1.1. WWF Global 200 Ecoregions map, list of existing or planned protected areas, IBA, WII and other HCVF occurring in the area.</p> <p>9.1.1.2. Forest inventory and other materials.</p> <p>9.1.1.3. Interviews with those involved in identification process.</p> <p>9.1.1.4. Interviews with stakeholders</p>
<p>9.1.2. It is determined whether the forest area being certified is part of a large forest landscape minimally disturbed by human agency (or contains such a landscape).</p> <p>Note: See further <i>Annex E</i> section <i>Categories of HCVF</i></p>	<p>9.1.2.1. Atlases and/or maps of large forest landscape minimally disturbed by human agency (intact forest landscapes).</p> <p>9.1.2.2. Forest inventory and other materials.</p> <p>9.1.2.3. Results of surveys in consistence with 9.1.2.1.</p> <p>9.1.2.4. Interviews with those involved in identification process.</p> <p>9.1.2.5. Interviews with stakeholders</p>
<p>9.1.3. It is determined whether the forest area being certified contains <i>rare, threatened or endangered ecosystems</i>.</p> <p>Note: See further <i>Annex E</i>, section <i>Categories of HCVF</i></p>	<p>9.1.3.1. Lists and maps of respective HCVF occurring in the area.</p> <p>9.1.3.2. Forest inventory and other materials.</p> <p>9.1.3.3. Interviews with those involved in identification process.</p> <p>9.1.3.4. Interviews with stakeholders</p>
<p>9.1.4. It is determined whether the forest area being certified contains sites that provide basic services of nature in critical situations.</p> <p>Note: See further <i>Annex E</i>, section <i>Categories of HCVF</i></p>	<p>9.1.4.1. A list and maps of respective HCVF occurring in the area.</p> <p>9.1.4.2. Forest inventory materials.</p> <p>9.1.4.3. Interviews with those involved in identification process.</p> <p>9.1.4.4. Interviews with stakeholders</p>
<p>9.1.5. It is determined whether the forest area being certified contains sites of special significance for <i>local communities</i>, including religious, cultural, ecological or economic significance (sites that <i>local people</i> regard as more significant when compared with surrounding forests).</p> <p>Note: This shall be done in part not covered by 2.2.3 and 3.3.1. Such areas could be sites actively used for collection of mushrooms and berries and recreation, sites of archeological and historical significance, war memorial sites, mass graves, cemeteries, churches, sacred groves, sacred trees and springs etc. See further <i>Annex E</i>, section <i>Categories of HCVF</i></p>	<p>9.1.5.1. A list and maps of respective HCVF occurring in the area.</p> <p>9.1.5.2. Interviews with those involved in identification process.</p> <p>9.1.5.3. Interviews with stakeholders</p>

Criteria 9.2. The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof	
Indicators	Means of verification
<p>9.2.1. The enterprise has conducted consultations with a wide range of <i>stakeholders</i> to identify <i>HCVF</i> and determine measures for their protection and management.</p> <p>Note: Consultations shall be conducted with organizations or experts (biologists, game biologists and ethnologists), which declared themselves as <i>stakeholders</i> with respect to a particular <i>HCVF</i> category and/or region (<i>stakeholder</i> lists can be requested from the National FSC Office, National FSC Initiative and regional working groups). Regarding HCV 5 and 6 consultations shall be conducted with local active civil society groups (veterans and hunters societies, regional history research group at libraries and schools, young naturalists groups), as well as with groups most dependant on forest</p>	<p>9.2.1.1. List of stakeholders with indication of HCVF category they are linked to. 9.2.1.2. Evidence of consultations (minutes of meetings, correspondence and other records). 9.2.1.3. Interviews with stakeholders</p>
<p>9.2.2. With involvement of <i>stakeholders</i> and on the basis of information in 9.2.1 criteria for identification and/or mapping of each <i>HCVF</i> category is prepared.</p> <p>Note: Each <i>HCVF</i> category (in some cases even subcategory and level) shall be analyzed separately. The absence of <i>HCVF</i> of a particular category (subcategory, level) shall be justified</p>	<p>9.2.2.1. Documentation collected during stakeholder consultations, agreements with stakeholders. 9.2.2.2. Evidence of adoption of stakeholder proposals on protection of HCVF or rationale for rejection of such proposals. 9.2.2.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 9.2.2.4. List of criteria for identification and maps of HCVF. 9.2.2.5. Interviews with stakeholders</p>
<p>9.2.3. With involvement of <i>stakeholders</i> and on the basis of information in 9.2.2, a set of measures on <i>HCVF</i> protection and management is prepared.</p> <p>Note: In a case of dispute regarding <i>HCVF</i> protection and management, the enterprise shall do all possible for finding a solution acceptable for both parties</p>	<p>9.2.3.1. Documentation collected during stakeholder consultations, agreements with stakeholders. 9.2.3.2. Evidence of positive response to stakeholder proposals on HCVF protection or rationale for rejection of such proposals. 9.2.3.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), other materials. 9.2.3.4. Maps of HCVF and list of measures on their protection or management. 9.2.3.5. Interviews with stakeholders</p>
<p>9.2.4. Identification parameters of <i>HCVF</i> as well as mapped <i>HCVF</i> are publicly available</p>	<p>9.2.4.1. Documentation on identification of HCVF, including maps. 9.2.4.2. Publicly available printed and web publications, other materials. 9.2.4.3. Interviews with stakeholders</p>

Criteria 9.3. The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary	
Indicators	Means of verification
<p>9.3.1. Requirements of 9.2.2 and 9.2.3 are reflected in the <i>forest management plan</i>, policies, and operating guidelines</p>	<p>9.3.1.1. Documentation on mapping and assigning management regime to HCVF. 9.3.1.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan), policies and operating guidelines. 9.3.1.3. Interviews with enterprise specialists</p>
<p>9.3.2. For each site identified as an area (ecoregion) containing globally or nationally significant concentrations of biodiversity values and/or contains other objects with high biodiversity (important bird areas, wetlands of international importance etc.), a set of measures for biodiversity conservation is being implemented.</p> <p>Note: See also 9.3.10 and 9.3.11 and <i>Annex E</i>, section <i>Management of HCVF</i></p>	<p>9.3.2.1. Maps of areas containing globally or nationally significant concentrations of biodiversity values, other materials. 9.3.2.2. Set of measures for biodiversity conservation. 9.3.2.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 9.3.2.4. Operating guidelines. 9.3.2.5. Harvesting documents (forest declarations, harvesting permits or orders), including maps. 9.3.2.6. Plans of forest management activities. 9.3.2.7. Interviews with stakeholders. 9.3.2.8. Field inspection</p>
<p>9.3.3. Large forest landscapes minimally disturbed by human agency are conserved.</p> <p>Note: Types of human agency that threaten these <i>HCVF</i> see by the example of <i>intact forest landscapes</i> (national level <i>HCVF</i>). Similar approaches can be used for mapping this <i>HCVF</i> category at the regional level. Approaches to management see <i>Annex E</i>, section <i>Management of HCVF</i></p>	<p>9.3.3.1. Maps and atlases of large forest landscape minimally disturbed by human agency (intact forest landscapes). 9.3.3.2. A list of measures to protect such forests. 9.3.3.3. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 9.3.3.4. Plan of management activities. 9.3.3.5. Interviews with stakeholders. 9.3.3.6. Field inspection</p>
<p>9.3.4. In cases when a large forest landscape minimally disturbed by human agency cannot be completely conserved due to specific local social conditions, strict conservation zones completely excluded from road and forestry development activities shall be established at part of its area.</p> <p>Note: See further <i>Annex E</i>, section <i>Management of HCVF</i></p>	<p>9.3.4.1. Maps and atlases of large forest landscape minimally disturbed by human agency (intact forest landscapes). 9.3.4.2. Maps of approved strict conservation zones. 9.3.4.3. A list of measures to protect such forests. 9.3.4.4. Evidence of communication with stakeholders, including agreements, meeting minutes and letters. 9.3.4.5. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 9.3.4.6. Plan of management activities. 9.3.4.7. Interviews with stakeholders. 9.3.4.8. Field inspection</p>

<p>9.3.5. Strict conservation zones (see 9.3.4) shall be surrounded with buffer zones</p>	<p>9.3.5.1. Maps and atlases of large forest landscape minimally disturbed by human agency (intact forest landscapes). 9.3.5.2. Maps of approved buffer zones. 9.3.5.3. Evidence of communication with stakeholders, including agreements, meeting minutes and letters. 9.3.5.4. Interviews with stakeholders</p>
<p>9.3.6. Within the buffer zones (see 9.3.5) best available forestry technologies and practices with regard to conservation of biodiversity and forest ecosystem shall be implemented.</p> <p>Note: Such technologies shall include harvesting techniques that <i>mimic natural dynamics</i> of a particular forest type (see 6.3.5) and provide maximum preservation of forest environment and its patchiness, <i>key habitats</i> (see 6.2), <i>key stand elements</i> (6.3.9–6.3.14), as well as <i>HCVF</i> (9.1). See further <i>Annex E</i>, section <i>Management of HCVF</i></p>	<p>9.3.6.1. Maps and atlases of large forest landscape minimally disturbed by human agency (intact forest landscapes). 9.3.6.2. Maps of approved buffer zones, protocols of agreements with stakeholders. 9.3.6.3. A list of measures to protect such forests. 9.3.6.4. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 9.3.6.5. Plan of management activities. 9.3.6.6. Interviews with stakeholders. 9.3.6.7. Field inspection</p>
<p>9.3.7. <i>Rare, threatened or endangered ecosystems</i> are conserved through complete or partial restriction of forestry operations in them.</p> <p>Note: See <i>Annex E</i>, section <i>Management of HCVF</i></p>	<p>9.3.7.1. Maps of rare, threatened or endangered ecosystems if available. 9.3.7.2. A list of measures to protect such ecosystems, which includes activities that are prohibited. 9.3.7.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 9.3.7.4. Plan of management activities. 9.3.7.5. Interviews with stakeholders. 9.3.7.6. Field inspection</p>
<p>9.3.8. The measures to provide maintenance or strengthening of the conservation values of forest areas that provide basic services of nature in critical situations are being implemented.</p> <p>Note: See further <i>Annex E</i>, section <i>Management of HCVF</i></p>	<p>9.3.8.1. Maps of forest areas that provides basic services of nature in critical situations if available. 9.3.8.2. A list of measures to protect such areas. 9.3.8.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 9.3.8.4. Plan of management activities. 9.3.8.5. Interviews with stakeholders. 9.3.8.6. Field inspection</p>
<p>9.3.9. The measures to protect the conservation values of forest areas that are critical for <i>local communities</i>, including areas of special religious, cultural, ecological or economic significance, are being implemented.</p> <p>Note: This shall be done in part not covered by indicators 3.3.2–3.3.5. See further <i>Annex E</i>, section <i>Management of HCVF</i></p>	<p>9.3.9.1. Maps of forest areas that are critical to local communities, including areas of special religious, cultural, ecological or economic significance. 9.3.9.2. A list of measures to protect such areas. 9.3.9.3. Lesokhozyaystvennyy reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials). 9.3.9.4. Plan of management activities. 9.3.9.5. Interviews with local communities and/or indigenous peoples groups. 9.3.9.6. Interviews with ethnologists and/or specialists on regional history. 9.3.9.7. Field inspection</p>

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<p>9.3.10. Conservation or management restrictions (regime) in <i>protected nature areas</i> are observed.</p> <p>Note: Observation of the regime implies that <i>forest management</i> in such a <i>protected area</i> shall ensure preservation of those conservation values, for protection of which it has been established as well as protection of any other <i>HCVF</i> within the <i>protected area</i>. See further <i>Annex D</i></p>	<p>9.3.10.1. Materials on existing protected nature areas, including maps.</p> <p>9.3.10.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials).</p> <p>9.3.10.3. Interviews with enterprise managers.</p> <p>9.3.10.4. Plan of management activities.</p> <p>9.3.10.5. Interviews with stakeholders.</p> <p>9.3.10.6. Field inspection</p>
<p>9.3.11. Candidate areas shall be excluded from road development and industrial use of natural resources.</p> <p>Note: See <i>Annex D</i></p>	<p>9.3.11.1. Materials on candidate areas, including maps.</p> <p>9.3.11.2. Lesokhozyaystvenny reglament (forest inventory materials) or proekt osvoyeniya (forest management plan, other materials).</p> <p>9.3.11.3. Interviews with enterprise managers.</p> <p>9.3.11.4. Plan of management activities.</p> <p>9.3.11.5. Interviews with stakeholders.</p> <p>9.3.11.6. Field inspection</p>
<p>9.3.12. The Public Summary of the <i>forest management plan</i> contains plans of management activities aimed at <i>HCVF</i> conservation and management</p>	<p>9.3.12.1. Plan of management activities aimed at conservation and management of <i>HCVF</i>.</p> <p>9.3.12.2. Availability of the summary of forest management plan to public.</p> <p>9.3.12.3. Availability of the Public summary, printed and web publications.</p> <p>9.3.12.4. Interviews with stakeholders</p>
<p>9.3.13. The Public Summary of <i>forest management plan</i> contains information to what extent <i>HCVF</i> are protected in the network of <i>representative samples of existing ecosystems</i> (see Criterion 6.4, including those in <i>protected areas, protective forests, and OZU</i>)</p>	<p>9.3.13.1. Public summary of forest management plan.</p> <p>9.3.13.2. Maps.</p> <p>9.3.13.3. Interviews with stakeholders</p>
<p>9.3.14. The enterprise has a procedure of disclosure of non-confidential information regarding <i>HCVF</i>, including their detailed maps and measures on their conservation and management.</p> <p>Note: The availability of the Public Summary of a <i>forest management plan</i> to public is regulated by 7.4.1</p>	<p>9.3.14.1. Procedure of disclosure of non-confidential information.</p> <p>9.3.14.2. Register of requests</p>
<p><i>Criteria 9.4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes</i></p>	
<p>Indicators</p>	<p>Means of verification</p>
<p>9.4.1. The effectiveness of the measures employed to maintain or enhance the characteristics of <i>HCVF</i> is determined on the basis of results of annual monitoring</p>	<p>9.4.1.1. Records of annual monitoring.</p> <p>9.4.1.2. Forest inventory materials, other materials.</p> <p>9.4.1.3. Field inspection</p>
<p>9.4.2. The enterprise on request gives away materials required for regular and independent monitoring of the condition of the <i>HCVF</i> (description of borders and/or maps of lease, <i>HCVF, representative samples of existing ecosystems</i> etc.) to <i>stakeholders</i></p>	<p>9.4.2.1. Evidence of correspondence and meetings with stakeholders on this issue.</p> <p>9.4.2.2. Interviews with enterprise managers.</p> <p>9.4.2.3. Interviews with stakeholders</p>

PRINCIPLE 10: PLANTATIONS

Plantations shall be planned and managed in accordance with Principles and Criteria 1–9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests

<i>Criteria 10.1. The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan</i>	
Indicators	Means of verification
<p>10.1.1. The enterprise has a <i>long-term</i> (for a <i>rotation period</i>) plan for establishing and maintaining the <i>plantation</i>, which contains management objectives, including conservation and/or restoration of natural forests.</p> <p>Note: Areas for conservation of natural biodiversity and/or restoration of natural forest should be located nearby the <i>plantations</i></p>	<p>10.1.1.1. OVOS and/or environmental expertise (ekologicheskaya ekspertiza) of the management plan.</p> <p>10.1.1.2. Plan for establishment and management of the plantation.</p> <p>10.1.1.3. Plan for conservation of natural biodiversity and/or restoration of natural forest.</p> <p>10.1.1.4. Interviews with enterprise managers.</p> <p>10.1.1.5. Field inspection</p>
10.1.2. Annual plan of management activities for the <i>plantation</i> and areas designed for conservation of natural biodiversity and/or restoration of natural forest is consistent with the <i>long-term</i> objectives	<p>10.1.2.1. Plan for establishment and management of the plantation.</p> <p>10.1.2.2. Annual plan of management activities.</p> <p>10.1.2.3. Interviews with enterprise managers</p>
10.1.3. The plan consistent with 10.1.1 is being implemented	<p>10.1.3.1. Plan for establishment and management of the plantation.</p> <p>10.1.3.2. Annual plan of management activities.</p> <p>10.1.3.3. Interviews with enterprise managers.</p> <p>10.1.3.4. Field inspection</p>

<p>Criteria 10.2. The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape</p>	
<p>Indicators</p>	<p>Means of verification</p>
<p>10.2.1. The design and location of the <i>plantations</i> shall promote protection, maintenance, and when necessary restoration of ecological and social values of natural forests in this area.</p> <p>Note: This can be achieved e.g. through establishment or protection of <i>water protective</i> (riparian) <i>zones, key habitats</i>, and corridors for wildlife and plants inside the <i>plantations</i></p>	<p>10.2.1.1. Plan for establishment and management of the plantation.</p> <p>10.2.1.2. Maps showing plantations, natural forests, water protective zones, key habitats, and ecological corridors.</p> <p>10.2.1.3. Interviews with enterprise managers and/or plantation designer.</p> <p>10.2.1.4. Field inspection</p>
<p>10.2.2. The size and layout of particular <i>management units</i> of the <i>plantations</i> shall be designed taking into account the structure of the natural ecosystems in the area</p>	<p>10.2.2.1. Plan for establishment and management of the plantation.</p> <p>10.2.2.2. Maps showing plantations, natural forests, water protective zones, key habitats and ecological corridors.</p> <p>10.2.2.3. Interviews with enterprise managers and/or plantation designer.</p> <p>10.2.2.4. Field inspection</p>
<p>10.2.3. <i>Plantations</i> whenever it is possible are established on lands disturbed by human activity of previous times on which <i>natural forest restoration</i> is impossible (see also 6.1.1, 6.3.3 and 6.3.4)</p>	<p>10.2.3.1. Plan for establishment and management of the plantation.</p> <p>10.2.3.2. Field inspection</p>
<p>Criteria 10.3. Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures</p>	
<p>Indicators</p>	<p>Means of verification</p>
<p>10.3.1. Monotony in the composition of <i>plantations</i> shall be avoided. This can be achieved by varying the size and spatial distribution and structure of <i>management units</i> (their age, composition etc.)</p>	<p>10.3.1.1. Plan for establishment and management of the plantation.</p> <p>10.3.1.2. Field inspection</p>
<p>10.3.2. The design of the <i>plantations</i> takes into account landscape peculiarities and needs of local people (e.g. hunting, fishing, and collection of berries, mushrooms, and nuts)</p>	<p>10.3.2.1. Plan for establishment and management of the plantation.</p> <p>10.3.2.2. Interviews with local communities.</p> <p>10.3.2.3. Interviews with stakeholders.</p> <p>10.3.2.4. Field inspection</p>

<p>Criteria 10.4. The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts</p>	
Indicators	Means of verification
10.4.1. The enterprise monitors increment, growing stock and condition of trees used in the <i>plantations</i>	10.4.1.1. Plan for establishment and management of the plantation. 10.4.1.2. Records of monitoring. 10.4.1.3. Field inspection
10.4.2. The use of <i>exotic species</i> is limited to nurseries where seedlings and Christmas trees can be produced for sale	10.4.2.1. Plan for establishment and management of the plantation. 10.4.2.2. Interviews with enterprise specialists. 10.4.2.3. Field inspection
10.4.3. The enterprise monitors <i>exotic species</i> to detect their invasiveness, unusual mortality, <i>disease</i> , or insect outbreaks, and adverse environmental impacts on local natural ecosystems	10.4.3.1. Plan for establishment and management of the plantation. 10.4.3.2. Records of monitoring. 10.4.3.3. Interviews with enterprise specialists. 10.4.3.4. Field inspection
10.4.4. When the adverse impacts of <i>exotic species</i> on the environment has been discovered (see 10.4.3), the relevant methods to eliminate these implications are implemented	10.4.4.1. Monitoring reports. 10.4.4.2. Records of the use of measures to eliminate implications connected with exotic species. 10.4.4.3. Interviews with enterprise specialists. 10.4.4.4. Field inspection
<p>Criteria 10.5. A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover</p>	
Indicators	Means of verification
10.5.1. The share of <i>plantations</i> within the area being certified shall not exceed 10%	10.5.1.1. Plan for establishment and management of the plantation. 10.5.1.2. Field inspection
10.5.2. When establishing <i>plantations</i> , the enterprise shall manage the equivalent area of <i>degraded</i> or <i>deforested lands</i> (if such are available) within the area being certified to restore natural forest cover.	10.5.2.1. Plan for establishment and management of the plantation. 10.5.2.2. Evidences that the enterprise is not responsible for degradation of lands. 10.5.2.3. Field inspection
<p>Notes: This does not apply to <i>plantations</i> established on <i>degraded</i> or <i>deforested lands</i>, when the current manager or leaseholder is not responsible for these changes (see 6.3.3, 6.3.4, and 10.2.3)</p>	

Criteria 10.6. Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns	
Indicators	Means of verification
10.6.1. The impact of <i>plantation</i> management on soil conditions is monitored	10.6.1.1. Records of monitoring of soil conditions. 10.6.1.2. Field inspection
10.6.2. The impact of the <i>plantation</i> management on water quality and quantity and water discharge pattern is monitored	10.6.2.1. Records of control over water conditions. 10.6.2.2. Field inspection
10.6.3. Requirements to road construction and maintenance as well as to management operations in <i>plantations</i> within the area being certified shall be the same as elsewhere on the forest areas (see 6.5.1–6.5.8, 6.5.10)	10.6.3.1. Plan for establishment and management of the plantation. 10.6.3.2. See relevant verifiers to 6.5.1–6.5.8, 6.5.10. 10.6.3.3. Field inspection
10.6.4. The establishment of <i>plantations</i> in <i>water protective zones</i> is prohibited	10.6.4.1. Plan for establishment and management of the plantation. 10.6.4.2. Field inspection
Criteria 10.7. Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7	
Indicators	Means of verification
10.7.1. The plan of fire management activities is being implemented	10.7.1.1. Plan for establishment and management of the plantation, including fire management activities. 10.7.1.2. Dynamics of areas affected by fires 10.7.1.3. Field inspection
10.7.2. Integrated <i>pest management</i> consistent with the requirements of Criteria 6.6–6.8 is being implemented to prevent <i>pest</i> outbreaks. Note: Thus, preventive and <i>biological control methods of pest</i> management shall be given preference in use over chemical <i>pesticides</i> and <i>fertilizers</i>	10.7.2.1. Plan for establishment and management of the plantation, including pest management activities. 10.7.2.2. List of measures of pest management. 10.7.2.3. Register of records of the use of pesticides and fertilizers. 10.7.2.4. Dynamics of pest-affected areas. 10.7.2.5. Interviews with enterprise specialists. 10.7.2.6. Field inspection
10.7.3. The enterprise uses <i>fertilizers</i> , including their use in nurseries, when this is required by soil and plant conditions, so that this does not pose a threat to nearby natural ecosystems (e.g. does not lead to eutrophication of rivers, lakes and bogs)	10.7.3.1. Plan for establishment and management of the plantation. 10.7.3.2. List of fertilizers used. 10.7.3.3. Register of records of the use of pesticides and fertilizers. 10.7.3.4. Justification of the need to use fertilizers. 10.7.3.5. Results of monitoring of condition of nearby ecosystems. 10.7.3.6. Interviews with enterprise specialists. 10.7.3.7. Field inspection

Criteria 10.8. Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site and off-site ecological and social impacts, (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access

Indicators	Means of verification
10.8.1. The enterprise, in addition to those elements addressed in principles 8 and 6, conducts monitoring of on-site and off-site environmental impacts of the <i>plantations</i> (e.g. natural regeneration, invasiveness of <i>exotic species</i> , effects on water resources and soil fertility)	10.8.1.1. Plan for establishment and management of the plantation. 10.8.1.2. Records of monitoring and operating procedures. 10.8.1.3. Interviews with enterprise specialists. 10.8.1.4. Field inspection
10.8.2. The enterprise, in addition to those elements addressed in principles 8 and 4, conducts monitoring of the on-site and off-site impacts of the <i>plantations</i> on local welfare and social well-being	10.8.2.1. Plan for establishment and management of the plantation. 10.8.2.2. Materials of assessment of social implications. 10.8.2.3. Interviews with enterprise specialists. 10.8.2.4. Interviews with local communities
10.8.3. Before planting <i>exotic species</i> on a large scale (see also 10.4.3) local trials and/or scientific experience should show that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems	10.8.3.1. Plan for establishment and management of the plantation. 10.8.3.2. Materials of scientific publications on the ecology and use of these exotic species. 10.8.3.3. Materials of field trials. 10.8.3.4. Interviews with enterprise specialists. 10.8.3.5. Field inspection
10.8.4. The enterprise monitors how land acquisition for <i>plantations</i> affected social issues, especially the protection of local rights of ownership, use or access	10.8.4.1. Plan for establishment and management of the plantation. 10.8.4.2. Materials of assessment of social implications. 10.8.4.3. Interviews with local authorities. 10.8.4.4. Interviews with local communities

Criteria 10.9. Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion

Indicators	Means of verification
10.9.1. For the <i>plantations</i> established in areas converted from natural forests after November 1994, the manner of their establishment and the reasons that required conversion of natural forest are documented	10.9.1.1. Documented historic evidences, forest inventory materials. 10.9.1.2. Maps. 10.9.1.3. Interviews with enterprise managers
10.9.2. During establishment of the <i>plantations</i> (after November 1994) the requirements of Criterion 6.10 have been observed or the current manager or leaseholder is not responsible for the planting	10.9.2.1. Documented historic evidences, forest inventory materials. 10.9.2.2. Maps. 10.9.2.3. Interviews with enterprise managers

ANNEXES

Annex A. Basic Laws and Administrative Regulations in Forest Management and Environment Protection

Land Code of the Russian Federation, No. 136-FZ, October 25 2001

The Land Code regulates relations with regard to use and protection of lands implying that land is a natural body, whose resources needs to be protected, a natural resource used in agriculture, forestry and other management activities, as well as real estate, ownership and other rights for land.

Urban Planning Code of the Russian Federation, No. 190-FZ, December 29 2004

The Urban Planning Code regulates relations in the sphere of development, urban planning and growth, maintenance of urban and rural populated areas, development of engineering, transportation and social infrastructure, use of natural resource and protection of historical and cultural heritage, and environment.

Water Code of the Russian Federation, No.74-FZ, June 3 2006

The Water Code regulates the use of water resources and protection of water bodies. Proprietary issues related to trade with water bodies are regulated by civil laws in part not covered by the Water Code. The Water Code prescribes establishment of water and coastal protection zones with a width ranging from 50 to 500 m along all water bodies. Clearcutting inside the water protective zones and coastal zones is prohibited.

Forest Code of the Russian Federation, No. 200-FZ, December 4 2006

The Forest Code regulates relations in the sphere of the use, protection, conservation, and regeneration of forest resources. The Code prescribes that harvesting of forest resources cannot be undertaken by governmental agencies and local authorities. Commercial use of forest resources shall occur only on a paid basis. Leaseholders are fully responsible for planning forest management, forestry operations, silviculture, and reforestation within the lease.

Federal *Protected Nature Areas Act*, No. 33-FZ, March 14 1995 (edited on December 29 2004)

The Federal *PNA Act* regulates relations in the sphere of organization, protection and use of protected areas to conserve unique and typical natural landscapes and features, natural landmarks, plants and animals and genetic resources as well as to research natural processes in the biosphere, to monitor its changes and to deliver environmental education.

Federal *Wildlife Act*, No. 52-FZ, April 24 1995 (edited on December 29 2004)

Federal *Wildlife Act* regulates relations in the sphere of protection and use of wildlife and habitat protection to maintain biodiversity, to provide sustainable use of all its components and to conserve wildlife and its genetic fund as an essential element of the environment.

Federal State Environmental Impact Assessment Act, No. 174-FZ, November 23 1995 (edited on December 29 2004) (with amendments effective from January 1 2007)

Federal *State Environmental Impact Assessment [Environmental Expertise] Act* specifies the procedure for environmental impact assessment. The state environmental impact assessment of the compliance of planned activities with the laws of the Russian Federation is an essential element of environmental assessment, without which any planned activities are prohibited.

According to changes made to the *State Environmental Impact Assessment Act* effective from January 1 2007, plans for the use of water and forest resources, including forest survey materials, are no longer subject to SEIA. The new Forest Code prescribes (Article 89) that forest management plans are subject to state assessment according to a procedure established by the relevant federal agency. However, there is no clarity yet on what would be assessed under this procedure. The procedure for environmental impact assessment made for the enterprise's needs (*OVOS*) is still regulated by the *State Environmental Impact Assessment Act*.

A set of key documents for the *State Environmental Impact Assessment Act* includes:

- Decision of the Government of the Russian Federation *On Adopting the Procedure of State Environmental Impact Assessment [Environmental Expertise]*, No. 698, June 11 1996;
- Order of the State Committee for Environment Protection of the Russian Federation *On Adopting the Regulations for Assessing the Environment Impact Caused by Planned Management and Other Activities in the Russian Federation*, No. 372, May 16 2000.

Federal Environment Protection Act, No. 7-FZ, January 10 2002 (Edition as of December 29 2004 with amendments effective from January 1 2006)

Federal *Environment Protection Act* specifies the legal basis of the national policy on environment protection to ensure balanced solution of socio-economic issues, to conserve favorable environment, protect biodiversity and natural resources in order to satisfy the needs of the present and future generations, and to provide environment law enforcement and environment safety.

Annex B. Multilateral Environment Agreements and Basic Conventions of the International Labour Organization Ratified by Russia

Conventions of the International Labour Organization

The International Labour Organization emerged with the League of Nations in 1919. It was founded to express the growing concern for social reform after World War I, and the conviction that any reform had to be conducted at an international level. After World War II, a dynamic restatement and enlargement of the ILO's basic goals and principles was made in the Declaration of Philadelphia. In 1946, the ILO became the first specialized agency associated with the newly formed United Nations Organization.

The ILO sets international labor standards as conventions and recommendations, providing minimum requirements to basic human rights (freedom of association, the right to organize and bargain collectively, the abolition of forced labor and child labor, and the elimination of discrimination in employment), labor administration, industrial relations, employment policy, working conditions, social security, occupational safety and health, employment of women, etc.

The ILO has a tripartite structure unique in the United Nations, in which employers' and workers' representatives have an equal voice with those of governments.

Russia ratified several ILO conventions. Some of them are important for meeting the requirements of FSC responsible forest stewardship:

1. ILO 87: *Freedom of Association and Protection of the Right to Organize Convention*, 1948 (the USSR participates since 1956);
2. ILO 98: *Right to Organize and Collective Bargaining Convention*, 1949 (since 1956);
3. ILO 100: *Equal Remuneration Convention*, 1951 (since 1956);
4. ILO 111: *Discrimination (Employment and Occupation) Convention*, 1958 (since 1961);
5. ILO 155: *Occupation Safety and Health Convention*, 1981 (since 1998).

ILO conventions (in Russian) can be found on the website of the ILO Subregional Office for Eastern Europe and Central Asia: http://www.ilo.ru/about_ru.htm.

Countries, which signed the conventions, shall make their national and regional labor and employment laws being in compliance with ILO standards.

According to the decision by FSC Board, all certificate holders shall comply with a number of ILO conventions, even if the country has not ratified the conventions. The following ILO labor conventions have an impact on forestry operations and practices: 29, 87, 97, 98, 100, 105, 111, 131, 138, 141, 142, 143, 155, 169, and 182; and *The ILO Code of Practice on Safety and Health in Forestry Work* (1998).

Convention on Biological Diversity

FSC Criterion 1.3 demands to adhere to the provisions of binding international conventions, such as the *Convention on Biological Diversity* (CBD). CBD was signed in Rio de Janeiro (Brazil) in June 1992. Russia signed the Convention on June 13 1992 and ratified it by the Federal Act No. 16-FZ, February 17 1995.

CBD has three main targets: 1) the conservation of biological diversity, 2) the sustainable use of biological resources, and 3) fair and equal sharing of benefits arising out of the use of biodiversity resources. Some provisions of the Convention are directly covered by laws of the Russian Federation. FSC Principles 6–8 are directed to the implementation of CBD requirements.

Convention on Wetlands of International Importance, Especially as Waterfowl Habitat

Russia is a party of the *Convention on Wetlands of International Importance, Especially as Waterfowl Habitat* (adopted in Ramsar on February 2 1971), also known as the Ramsar Convention.

Under the Convention, some wetlands in Russia were granted with the Ramsar status. In accordance to the Land Code (Article 97), valuable wetlands may be considered as nature conservation lands, where operations that cause damage to nature may be considerably limited while environment conservation actions are encouraged. A decision to grant such status to a wetland is taken by the Government of the Russian Federation if the Secretariat of the Convention decides that the area nominated in accordance to the established procedure meets the relevant criteria.

Convention Concerning the Protection of the World Cultural and Natural Heritage

The Convention Concerning the Protection of the World Cultural and Natural Heritage was adopted by UNESCO in Paris (France) on November 16 1972. The Convention was ratified by the Decree of the Presidium of the Supreme Soviet of the USSR No. 8595-XI, March 9 1988. It is aimed at conserving and popularizing landmarks of high importance for the humankind. The World Heritage Committee established as a follow-up of the Convention was charged to organize the protection and popularization of World Heritage Sites and to keep a list of properties having outstanding universal value from the historical, cultural, scientific, aesthetic, conservation, or natural beauty points of view and *The List of World Heritage in Danger*. World Heritage Sites consist of various level protected areas.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

FSC Criterion 1.3 demands to fulfill to the provisions of binding international conventions, such as the *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*. CITES has been signed in Washington DC (USA), March 3 1973. Its aim is to exercise control of international trade in specimens of wild animals and plants whose number has been undermined or can be undermined because they are popular objects of trade.

CITES entered in force in 1975. The USSR joined it in 1976. The Russian Federation as the successor of the USSR is a Party of the Convention since 1992. To protect rare species of animals and plants, the Convention controls their movement across borders between countries that are CITES Parties. The species covered by CITES are listed in three Appendices. Commercial trade in specimens listed in *Appendix I* is prohibited (although there are some exceptions). International trade in specimens listed in *Appendix II* is permitted but they may be imported or exported only if the appropriate document issued by the national Administrative body of CITES designated by the Governments of the signatory countries has been obtained. In Russia, this function is executed by the Ministry of Natural Resources (in the case of sturgeon, the Federal Agency for Fisheries of the Ministry of Agriculture). The List of mammals, birds, reptiles, amphibians, fish, invertebrates, and plants whose export, re-export, and import are regulated by the CITES was adopted by the 12th meeting of the Conference of the Parties (Santiago, November 2002).

In Russia, species under CITES are either included in the Red Data Book of the Russian Federation (e.g. ginseng *Panax ginseng*, golden eagle *Aquila chrysaetos*, saker falcon *Falco cherrug*, Amur tiger *Panthera tigris altaica*) or are less rare species but illegal hunting of which thrives (eagle owl *Bubo bubo*, Siberian musk deer *Moschus moschiferus*, brown bear *Ursus arctos*, grey wolf *Canis lupus*).

United Nations Framework Convention on Climate Change

The *UN Framework Convention on Climate Change* has been opened for signature at the UN's Earth Summit in Rio de Janeiro (Brazil) in 1992. Its aim is to prevent global climate change which is directly or indirectly caused by human activities, by controlling atmospheric concentrations of greenhouse gases. The Kyoto Protocol to the UN Framework Convention on Climate Change was adopted in Kyoto (Japan), December 11 1997 and has signed by Russia in New York, March 11 1999. The Kyoto Protocol determines the level of greenhouse gases emissions to be re-

duced by each Party. In accordance to the Protocol, developed countries shall reduce emissions of carbon dioxide and five more greenhouse gases by 5.2% compared to the level of 1990. This figure shall be reached from 2008 or 2012, at the latest. Russia has ratified the Kyoto Protocol, November 4 2004.

Responsible forest management can contribute to a solving this problem. By affecting carbon flows in the biosphere, depending on its condition, forest can both accumulate and emit greenhouse gases. It is important that a certified area shall contribute to the accumulation of organic carbon in overall. This objective is achieved by fulfilling Criteria 6.10 (restricting forest conversion to forest plantations or non-forest land uses), indicators of Criterion 6.5 (controlling erosion), as well as indicators of criteria 6.3 and 8.2 which require provision of timely forest regeneration.

Pan-European Biological and Landscape Diversity Strategy

The Pan-European Biological and Landscape Diversity Strategy (PEBLDS) was adopted at the 3d *Environment for Europe* Conference of Ministers of the Environment held in Sofia (Bulgaria) in 1995. PEBLDS is declared as a European contribution to the implementation of the *Convention on Biological Diversity* (1992). The Strategy is aimed at protection of biological and landscape diversity in Europe. Its objectives include:

- conservation, enhancement, and restoration of key ecosystems, habitats, species, and landscape features through creation and effective management of the Pan-European Ecological Network; and
- sustainable management and use of the positive potential of Europe's biological and landscape diversity through making optimum use of social and economic opportunities at the local, national and regional levels.

PEBLDS does not aim to introduce new legislation or programs, but to integrate all initiatives concerning the biological and landscape diversity in the common Pan-European approach. The legal framework for PEBLDS is constituted by widely recognized international agreements and treaties, including the aforementioned ones. The Russian Federation also ratified the *Memorandums of Understanding Concerning Conservation Measures for the Slender-billed Curlew and Siberian Crane* under the *Bonn Convention*.

The Declaration of the Third Ministerial *Environment for Europe* Conference set a task to contribute to environment conservation both within and outside protected areas through creation and effective management of the Pan-European Ecological Network – a physical network of core areas and other natural objects connected by corridors and supported by buffer zones to facilitate the dispersal and migration of species.

The Kyiv Resolution on Biodiversity (2003) set Objectives 4 and 5 concerning the Pan-European Ecological Network:

- “4. By 2006, the Pan-European Ecological Network (core areas, restoration areas, corridors and buffer zones, as appropriate) in all States of the Pan-European region will be identified and reflected on coherent indicative European maps, as a European contribution towards a global ecological network.
5. By 2008, all core areas of the Pan-European Ecological Network will be adequately conserved and the Pan European Ecological Network will give guidance to all major national, regional and international land use and planning policies as well as to the operations of relevant economic and financial sectors.”

Annex C. Legal Framework for Protection of Rare, Threatened, and Endangered Species of Plants, Animals, and Fungi

Red Data Book of the Russian Federation

The **FSC Criterion 6.2** prescribes that the “Safeguards shall exist which protect rare, threatened, and endangered species and their habitats (e.g. nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled.”

Lists of rare, threatened, and endangered species exist for different levels: international, national, and regional. The IUCN–World Conservation Union’s Red Data Book has been historically the first in a series of such publications. It was prepared for the first time in 1963 and immediately received recognition at an international level by many national governments. The species list in the IUCN Red Data Book is regularly updated (Baillie *et al.*, 2004). Species included in the *IUCN Red List of Threatened Species* shall be also protected at the national level.

Russia is considering ratification (adoption, approval, and joining) of two conventions related to conservation of European species and currently participates in their work on issues relating to its competence. These are the *Convention on the Conservation of European Wildlife and Natural Habitats* (Bern Convention) and the *Convention on Migratory Species* (Bonn Convention).

Russia has also signed several bilateral agreements on environment protection, in particular on protection of migratory birds, with the USA, India, North Korea, Republic of Korea, Japan etc.

Besides that, lists of rare, threatened, and endangered species can cover a particular biogeographical region. An example is the, well-known is the *Red Data Book of Eastern Fennoscandia* (Kotiranta *et al.*, 1998) compiled by Finnish and Russian experts for Finland, Murmansk Oblast, Republic of Karelia and the northern part of Leningrad Oblast.

The first national Red Data Book in the USSR was presented in 1978 at the opening of the XIV IUCN General Assembly held in Ashkhabad.

On December 19 1997, the State Committee for Environment Protection of Russia (Goskomekologiya) issued the order No. 569 *On Approving the Lists of the Fauna Objects Included in the Red Data Book of the Russian Federation and Excluded from the Red Data Book Data of the Russian Federation* (with changes as of September 9 2004).

The volume of the *Red Data Book of the Russian Federation (Animals)* was published in 2001. Meanwhile the volume devoted to plants and fungi was last time officially published only in 1988 as the *Red Data Book of the Russian Soviet Federative Socialist Republic (Plants)*. The order by the Ministry of Natural Resources of the Russian Federation as of October 25 2005 No. 289 *On Approving the Lists of Flora Being Included in and Excluded from the Red Data Book of the Russian Federation* (as of June 1 2005) introduced some changes to red-listed species of plants.

It is worth noting that according to the decree of the government of the Russian Federation No. 952 as of August 13 1996 Russia joined the *Agreement on the Book on Rare, Threatened, and Endangered Species of Animals and Plants – The Red Data Book of CIS Countries*.

The Red Data Book of Russian Federation lists rare and threatened species of animals, plants, and fungi which are native to and temporarily or permanently occur in the wild on the territory, continental shelf or marine economic zone of the Russian Federation and which require special governmental and legal actions within the competence of the executive authorities. Keeping and publishing the *Red Data Book* Russia fulfils part of its obligations within the frameworks of the *Convention on Biological Diversity* (adopted in 1992 in Rio de Janeiro).

In the *Red Data Book of the Russian Federation*, there are six categories which classify all taxa and populations by risk of extinction:

- 0 – most likely extinct;
- 1 – endangered;
- 2 – reducing in the number;
- 3 – rare;
- 4 – with uncertain status; and
- 5 – recovered and recovering.

The category of most likely extinct includes taxa and populations which historically occurred at the area of the Russian Federation but whose occurrence in the wild has not been confirmed (for invertebrates in the last 100 years and for vertebrates in the last 50 years). Endangered species are those taxa and populations whose numbers reduced down to the critical level so that they may extinct in the nearest future. Species reducing in the number include taxa and populations characterized by a continuing decline in number so that they may shortly enter the category of endangered species. Taxa and populations are considered rare if they are small in number and/or occur only within the limited area or sporadically over relatively large area. Taxa and populations that require special protective measures but are currently data deficient or do not fully meet the rest of the criteria are considered as species of uncertain status. Recovered and recovering species includes those taxa and populations whose number and extent of occurrence began to recover because of natural reasons or conservation measures undertaken so that they approach a condition when they do not require urgent measures for conservation and recovery.

At the national level, protection of rare and threatened species, besides listing in the Red Data Book, is regulated by a number of laws on nature protection and use of natural resources.

According to the Article 60 of the Federal *Environment Protection Act* “Protection of rare, threatened, and endangered species of plants, animals, and other organisms”:

“1. In order to provide protection and account of rare and threatened species of plants, animals and other organisms, the Red Data Book of the Russian Federation is established as well as Red Data Books of the administrative regions of the Russian Federation. Red listed plants, animals, and other organisms shall be withdrawn from economic use. ... Any activity that leads to reduction in the number of such plants, animals, and other organisms and to deterioration of their environment is prohibited.

2. Procedures for protection of rare and threatened plants, animals, and other organisms and keeping of the Red Data Book of the Russian Federation and Red Data Books of its administrative regions ... are set up by the environmental legislation.”

According to the Article 24 of the Federal *Fauna Act* “Protection of rare and threatened objects of the fauna”:

Rare and threatened species of the fauna are listed in the Red Data Book of the Russian Federation and (or) Red Data Books of the administrative regions of the Russian Federation.

The activities that may lead to death, reduction in number or destruction of habitats of species of fauna enlisted in the Red Data Books are not permitted.

Legal entities and citizens performing any economic activity in the area of occurrence of red listed animals are responsible for protection and reproduction of these species of fauna according to the legislation of the Russian Federation and its administrative regions”

According to the Article 59 of the Forest Code “Protection of rare and threatened species of trees, shrubs, lianas, and other forest plants”:

“In order to provide conservation of rare and threatened species of trees, shrubs, lianas and other forest plants listed in the Red Data Book of the Russian Federation or red data books of administrative regions of Russia, activity leading to reduction in number of such species and to deterioration of their habitats can be prohibited or certain restrictions to perform such activity can be introduced.”

To meet the requirements of the legislation on protection of rare and threatened plants, animals, and other organisms, the government of the Russian Federation adopted the Decree No. 158 as of February 19 1996 (with changes as of April 24 2003) *On Red Data Book of the Russian Federation*. In addition, special regulations were worked out.

Materials on protection of rare and threatened plants and animals, including the List of species of plants and fungi protected at the federal level can be found in the publication *Red Data Book of Russia: Legal Acts* (2000).

The list of species prohibited for harvest in the forests of the Russian Federation according to the decree No. 162 as of March 15 2007 of the government of the Russian Federation (with changes approved by the decree as of September 18 2007) *On Approval of the List of Tree and Shrub Species, whose Timber is Prohibited for Harvest* see Table 1C. Unfortunately, this decree does not list tree species protected at the regional level.

According to the Timber Harvesting Regulations approved by the order no. 184 of the Ministry of Natural Resources of the Russian Federation as of July 16 2007:

“...10. During timber harvesting trees of species listed in the Red Data Book of the Russian Federation, red data books of the administrative regions of the Russian Federation as well as their habitats shall be preserved... .”

Table C1. Tree and shrub species, whose timber is prohibited for harvest

English name	Latin name
Trees	
Amur cork tree	<i>Phellodendron amurense Rupr.</i>
Apple, all species	<i>Malus Mill.</i>
Apricot, all species	<i>Armeniaca Scop.</i>
Aralia continentalis	<i>Aralia continentalis Kitag.</i>
Aralia cordata	<i>Aralia cordata Thunb.</i>
Big-leaf magnolia	<i>Magnolia hupoleuca Siebold et Zucc. (Magnolia obovata Thunb.)</i>
Bothrocaryum controversum	<i>Bothrocaryum controversum (Hemsl. et Prain) Pojarkov</i>
Box, all species	<i>Buxus L.</i>
Caucasus wing-nut	<i>Pterocarya pterocarpa (Michx.) Kunth ex Iljinsk.</i>
Chalk pine	<i>Pinus sylvestris L. var. cretacea Kalenicz. ex Kom.</i>
Cherry plum	<i>Prunus divaricata Ledeb.</i>
Cherry, all species	<i>Cerasus Mill.</i>
Chinese flowering ash, or Japanese flowering ash	<i>Fraxinus lanuginose Koidz., Fraxinus sieboldiana Blume</i>
Common walnut	<i>Juglans regia L.</i>
Crimean pine	<i>Pinus pallasiana D. Don.</i>
Daimyo oak	<i>Quercus dentate Thunb.</i>
Date-plum, persimmon	<i>Diospyros lotus L.</i>
European hop-hornbeam	<i>Ostrya carpinifolia Scop.</i>
European yew	<i>Taxus baccata L.</i>
Full-moon maple, or Japanese maple	<i>Acer japonicum Thunb.</i>
Greek juniper	<i>Juniperus excelsa Bieb.</i>
Japanese red pine	<i>Pinus densiflora Siebold et Zucc.</i>
Japanese red pine	<i>Pinus x funebris Kom. (P. densiflora Siebold & Zucc. x P. sylvestris L.)</i>
Japanese walnut	<i>Juglans ailanthifolia Carr.</i>
Japanese yew	<i>Taxus Cuspidate Siebold et Zucc. ex Endl.</i>
Kalopanax, or prickly castor-oil tree	<i>Kalopanax septemlobus (Thunb.) Koidz.</i>
Karelian birch	<i>Betula pendula Roth var. carelica (Merckl.) Hamet-Ahti</i>
Korean mountain ash	<i>Sorbus alnifolia (Siebold. et Zucc.) C. Koch (Micromeles alnifolia (Siebold. et Zucc.) Koechne)</i>
Manchurian fir	<i>Abies holophylla Maxim.</i>
Manchurian walnut	<i>Juglans mandshurica Maxim.</i>
Maximowicz's linden	<i>Tilia maximowicziana Shirasawa</i>
Monarch birch	<i>Betula maximowicziana Regel</i>
Mulberry, all species	<i>Morus L.</i>
Olga Bay larch	<i>Larix olgensis A. Henry</i>

Russian National FSC Standard

English name	Latin name
Oriental plane	<i>Platanus orientalis</i> L.
Pear, all species	<i>Pyrus</i> L.
Pistachio	<i>Pistacia mutica</i> Fisch. et C.A. Mey
Pityusa pine	<i>Pinus pityusa</i> Stev.
Radde's birch	<i>Betula raddeana</i> Trautv.
Sakhalin cork tree	<i>Phellodendron sachalinense</i> (Fr. Schmidt) Sarg.
Sakhalin fir (Kamchatka variety)	<i>Abies gracilis</i> Kom.
Sakhalin spruce	<i>Picea glehnii</i> (Fr. Schmidt) Mast.
Schmidt's birch	<i>Betula schmidtii</i> Regel
Stinking juniper	<i>Juniperus foetidissima</i> Willd.
Sweet chestnut or European chestnut	<i>Castanea sativa</i> Mill.
Sycamore maple	<i>Acer pseudoplatanus</i> L.
Temple juniper, or needle juniper	<i>Juniperus rigida</i> Siebold et Zucc. subsp. <i>Litoralis</i> Urussov
Turkish hazel	<i>Corylus colurna</i> L.
White fir	<i>Abies mayriana</i> (Miyabe et Kudo) Miyabe et Kudo
Yezo water oak	<i>Quercus crispula</i> Blume
Zelkova, or Caucasian elm	<i>Zelkova carpinifolia</i> (Pall.) C. Koch
Shrubs	
Colchis bladdernut	<i>Staphylea colchica</i> Stev.
European bladdernut	<i>Staphylea pinnata</i> L.
Exochorda serratifolia	<i>Exochorda serratifolia</i> S. Moore
Sugeroku's holly	<i>Ilex sugerokii</i> Maxim.
Tolmachev's honeysuckle	<i>Lonicera tolmatchevii</i> Pojark.
Wright viburnum	<i>Viburnum wrightii</i> Miq.

According to Art. 102 of the Forest Code of the Russian Federation: “Special protection forest habitats can be identified to protect: ...

5) forest habitats with the presence of relic and endemic plants; and

6) habitats of rare, threatened, and endangered wildlife”.

These categories of special protection forest habitats (OZU) can be used for protection of critical habitats (key habitats) of rare, threatened, endangered, vulnerable, and care-demanding species of plants, animals, and fungi, as well as some high conservation value forests (see *Annex E*).

According to the Timber Harvesting Regulations (2007), in harvest area design, habitats of rare, threatened, and endangered species and other known key habitats can be designated as non-exploitable areas (NEP), in which no harvesting shall occur. NEPs can be also designated during timber harvesting operations if such areas had been overlooked earlier (further details see below).

Regional Red Data Books

According to the *Wildlife Act* (Article 24) (see above), each administrative region of the Russian Federation shall develop and publish its own Red Data Book. Regional Red Data Books are published either as joint volumes devoted to animals, plants and fungi, or as separate volumes on particular kingdom.

The majority of regional Red Data Books refer to a particular administrative region of Russia. However, in some cases they could refer to several administrative regions. Thus, the Red Data Book of Arkhangelsk Oblast contains data for Nenets Autonomous Okrug, while those of Chita Oblast for Agin–Buryat Autonomous Okrug and Irkutsk Oblast for Ust-Orda Buryat Autonomous Okrug, respectively. The Red Data Book of the Middle Urals includes data for Sverdlovsk Oblast and Perm Kray, whereas that of the Northern Far East contains data for Kamchatka and Magadan oblasts and Koryak and Chukotka autonomous okrugs.

The majority of regional Red Data Books are arranged similarly to the *Red Data Book of the Russian Federation* (2001). Articles on particular species are organized according to the following

scheme: species name and systematic position, status of rareness and vulnerability, extent of occurrence, number, ecology, limiting factors, undertaken and required protection measures, and sources of information. Sometimes maps are provided showing the occurrence of particular species. The majority of regional Red Data Books include both lists of species and annotated articles.

When identifying the rarity and vulnerability of species, the majority of regional Red Data Books refer to IUCN categories. However, in the Red Data Book of the Russian Federation, obsolete categories are used. The new IUCN classification (Categories, 2002), is not yet used anywhere.

Regional Red Data Books fall into two categories according to their legal status: official (published with observation of relevant regulations and procedures) and scientific (published without observation of the relevant legal requirements and, therefore not providing legal protection for the listed species).

Some official regional Red Data Books are published with violation of the legislation. For example, the list of species in the Red Data Book may not match that, which was preliminarily approved by the legislative bodies of the administrative region of the Russian Federation. In some cases, the Rules on a regional Red Data Book could be approved by the regional legislative authorities, while the List of Rare and Threatened Species could be not.

Red Data Books with scientific status can acquire a legal status after observing the relevant procedure, e.g. after official approval of the Rules on the Red Data Book and the List of species nominated to the Red Data Book.

The officially approved List of species in the regional Red Data Book may differ from the officially approved List of candidate species. In this case, it is recommended to use the data of Red Data Book itself as it is approved by the decision of the regional administration.

Identification and Protection of Habitats of Rare, Threatened, and Endangered Species of Plants, Animals, and Fungi

Enterprise that seeks FSC certification should approach specialists on rare, threatened, and endangered species and commission them to do the following:

- to compile lists of rare, threatened, and endangered species for the area as well as a list of likely critical habitats (key habitats) of rare, threatened, endangered, vulnerable to disturbance, and care-demanding species that can be threatened by forestry-related activities. Such a list shall be compiled based on the *Red Data Book of the Russian Federation* and relevant regional red data books;
- to review available materials on rare, threatened, and endangered species occurring in the area;
- to develop a set of recommendations for identification of such species habitats and their protection measures (some protection measures could be found in the red data books). The Red Data Book of the Russian Federation and relevant regional red data books may be used to justify the need for protection of key habitats, while the latter can be identified using more common and noticeable indicator species;
- to conduct when necessary additional surveys for identification of habitats with concentrated occurrence of rare, threatened, and endangered species of plants and habitats critical for rare, threatened, and endangered species of wildlife.

After that the forest managers should approach forest surveyors in order:

- to whatever extent possible to take into account available materials on rare, threatened, and endangered species in the lesokhozyaystvennyy reglament for a particular district level forest management administration unit (lesnichestvo) and forest management plan for a lease area;
- to establish water protective zones alongside all water bodies with a width consistent to the Water Code requirements;
- to establish OZU and NEP, including those in habitats critical for rare, threatened, and endangered species, coast protective forest habitats, forest habitats near the sources of rivers and streams and forest habitats with the presence of relic and endemic plants; and
- to include protection measures for habitats of rare, threatened, and endangered species, including criteria for identification of their likely critical habitats, in the forest management plan.

Table C2. Effective Red Data Books of the administrative regions of the Russian Federation (after Gorbatovskiy, 2003, with corrections)

Region	Year of Publishing	Book Status	Form of publication
Central Federal District			
Kaluga Oblast	2006	official	joint volume
Kursk Oblast	2001	scientific	volume on animals
	2001	scientific	volume on plants and fungi
Lipetsk Oblast	1997	scientific	volume on animals
City of Moscow	2001	official	joint volume
Moscow Oblast	1998	official	joint volume
Ryazan Oblast	2001	official	volume on animals
	2002	official	volume on fungi and plants
Smolensk Oblast	1997	official	joint volume
Tambov Oblast	2000	official	volume on animals
	2002	official	volume on plants, lichens and fungi
Tver Oblast	2002	official	joint volume
Northwestern Federal District			
Arkhangelsk Oblast and Nenets Autonomous Okrug	1995	official	joint volume
Komi Republic	1998	official	joint volume
Leningrad Oblast	2000	official	volume on plants and fungi
	2002	official	volume on animals
Murmansk Oblast	2003	official	joint volume
Republic of Karelia	1995	official	joint volume
City of St. Petersburg	2004	official	joint volume
Southern Federal District			
Krasnodar Kray	1994	official	joint volume
Republic of Adygeya	2000	official	joint volume
Republic of Dagestan	1998	official	joint volume
Republic of Kabardino–Balkaria	2000	official	joint volume
Republic of Karachay–Cherkessia	1998	scientific	joint volume
Republic of North Ossetia–Alania	1999	official	joint volume
Stavropol Kray	2002	official	volume on animals
	2002	official	volume on plants
Volgograd Oblast	1992	scientific	joint volume
Volga Federal District			
Astrakhan Oblast	2004	official	joint volume
Chuvash Republic	2001	official	volume on plants and fungi
Kirov Oblast	2001	official	joint volume
Nizhny Novgorod Oblast	2003	official	volume on animals
	2005	official	volume on vascular plants, lichens and fungi
Orenburg Oblast	1998	official	joint volume
Penza Oblast	2002	official	volume on plants and fungi
Perm Kray*	1996	official	joint volume
Republic of Bashkortostan	2001 (v. 1)	official	volume on plants
	2002 (v. 2)	official	volume on mosses, alga, lichens and fungi
	2004	official	volume on animals

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Region	Year of Publishing	Book Status	Form of publication
Republic of Mari El	1997 2002	official official	volume on plants volume on animals
Republic of Tatarstan	1995	official	joint volume
Republic of Udmurtia	2001 2001	official official	volume on animals volume on plants, lichens and fungi
Saratov Oblast	1996	official	volume on plants, fungi and lichens
Ural Federal District			
Chelyabinsk Oblast	2005	official	joint volume
Khanty–Mansi Autonomous Okrug	2003	official	joint volume
Kurgan Oblast	2002	official	joint volume
Sverdlovsk Oblast*	1996	official	joint volume
Yamalo–Nenets Autonomous Okrug	1997	official	joint volume
Siberian Federal District			
Altay Kray	1998 1998	official official	volume on animals volume on plants
Buryat Republic	1988 2002	official official	volume on animals volume on plants and fungi
Chita Oblast and Agin–Buryat Autonomous Okrug	2000 2000	scientific scientific	volume on animals volume on plants
Irkutsk Oblast and Ust-Orda Buryat Autonomous Okrug	2001	official	volume on plants
Kemerovo Oblast	2000 2000	official official	volume on animals volume on plants and fungi
Krasnoyarsk Kray	2000 2005	official official	volume on animals volume on plants and fungi
Novosibirsk Oblast	1998 2000	official official	volume on plants volume on animals
Republic of Altay	1996 1996	official official	volume on animals volume on plants
Republic of Khakassia	2002	official	volume on plants and fungi
Tomsk Oblast	2002	official	joint volume
Tuva Republic	1999 2002	scientific scientific	volume on plants volume on animals
Far Eastern Federal District			
Amur Oblast	1995	official	volume on plants
Chukotka Autonomous Okrug**	1998	scientific	volume on animals
Jewish Autonomous Oblast	1997	official	volume on plants
Kamchatka Oblast**	1998	scientific	volume on animals
Khabarovsk Kray	2000	official	joint volume
Koryak Autonomous Okrug**	1998	scientific	volume on animals
Magadan Oblast**	1998	scientific	volume on animals
Republic of Sakha (Yakutia)	1987 2000	scientific official	volume on animals volume on plants and fungi
Sakhalin Oblast	2000	official	volume on animals

* See *Red Data Book of the Middle Urals (Sverdlovsk and Perm Oblasts): Rare and Threatened Species of Animals and Plants*.

** See *Red Data Book of the Northern Far East*.

Table C3. Degree of readiness of unpublished Red Data Books of the administrative regions of the Russian Federation (after Gorbatovskiy, 2003, with modifications)

Oblast	Year of Red Data Book establishing	Expected year of publishing	Form of publication
Central Federal District			
Belgorod Oblast	2002	2004 2004	volume on animals volume on plants
Orel Oblast	1996	2004	joint volume
Yaroslavl Oblast	2000	2003	joint volume
Northwestern Federal District			
Vologoda Oblast	in the stage of agreement and approval	2004 2005	volume on plants volume on animals
Southern Federal District			
Chechen Republic	2003	2004–2005	joint volume
Republic of Ingushetia	2003	2004	joint volume
Republic of Kalmykia	1998	2005–2006	no data
Volga Federal District			
Republic of Mordovia	2003	2003 2003	volume on animals volume on plants
Samara Oblast	in the process of agreement and approval	2004	joint volume
Ulyanovsk Oblast	2002	2003	joint volume
Ural Federal District			
Tyumen Oblast	2002	2004	joint volume
Far Eastern Federal District			
Primorskiy Kray	1999	2003 2004	volume on animals volume on plants

The approval by the state ecological expertise (state environmental impact assessment) of the forest management plan containing a special section on protection of rare, threatened, and endangered species can facilitate justification of the need for implemented management activities for protection and enforcement agencies in the sphere of forest management.

Generally it not possible to survey all habitats of rare, threatened, and endangered species in field. Nonetheless, it is necessary to ensure that at least the largest populations or critical habitats (key habitats) with high concentration of plants, fungi, and invertebrates as well as of habitats critical for lifecycles of vertebrates (e.g. nesting grounds, borrows, refugia, sites for concentration or permanent migration routes, and foraging and feeding grounds) are identified. Examples of key habitats for large vertebrates are natural outcrops of salt-bearing rocks, rock outcrops, swamps, sparse forests, burnt and snag areas, areas rich with berries, bear lairs, places with high winter concentration of hooved animals, nesting grounds of large birds etc. Destruction of the critical habitats (e.g. natural outcrops of salt-bearing rocks or spawning grounds of fish) may lead to a drastic reduction in number of even common wildlife species (including game and fisheries species). The management regime in the key habitats shall completely exclude or seriously restrict harvesting of timber and prohibit road construction and location of temporary loggers' camps, store areas and other objects.

For preservation of a majority of forest biodiversity during harvesting, it is sufficient to protect the key habitats of rare, threatened, endangered species, vulnerable to disturbance, and care-demanding species. The direct identification of such species and their habitats during field surveys is a laborious and long process. It can be accelerated or made easier by protecting habitats with high probability of non-accidental occurrence of the species above. Such places are much easier to identify (even for non-specialists) using indirect characteristics such as the presence of indicator species

or certain biotope characteristics. The following examples of the critical habitats (key habitats) for plants and fungi (as well as for many species of wildlife) can be mentioned:

- wetlands (including bogs, fens, and swamps) and wet areas, including those with the timber growing stock less 50 cubic meter per hectare;
- stands on steep slopes greater than 20 degrees;
- stands on rock outcrops and rocky places, especially with calcareous soils;
- stands with the presence of rare and endemic plant species, e.g. stands with a high admixture (in the southern taiga zone of European Russia) of noble broadleaf species and/or noticeable presence of nemoral flora in the lower stand layers (in the north of the taiga zone) or stands with admixture of Siberian larch and Siberian pine in European Russia;
- old growth black alder stands;
- reference (late seral stages) patches of unevenaged coniferous forests (with the presence of very old trees, large-size snags, openings, and windthrow patches, spruce stands with tall herbaceous plants and fire refugia) (i.e., old growth, intact or pristine forests).

Once such a stand has been identified, no harvesting shall occur there or it shall be restricted in accordance with the guidelines on preservation of the respective habitats developed by knowledgeable organizations.

According to Art. 102 of the Forest Code of the Russian Federation “Protective forests and special protection forest habitats” (OZU):

“3. Special protection forest habitats include:

- 5) habitats of forest along ravines and water objects protecting banks and soil;
- 5) edges of forest at the border with non-forest areas;
- 5) permanent seed base areas;
- 5) strictly protected (zapovednye) forest areas;
- 5) forest habitats with the presence of relic and endemic plants;
- 5) habitats of rare, threatened and endangered wildlife; and
- 5) other special forest habitats.

Legal justifications for leaving key habitats as OZU and NEP also can be found in the Timber Harvesting Regulations (2007). See further *Preservation and Maintenance of Ecological Functions and Values during Harvesting*.

Identification and Protection of Key Stand Elements during Harvesting

Deadwood at different decomposition stages with tree regeneration groups and snags (high stumps) is the key substratum for a group of rare and vulnerable to disturbance habitat specialists (plants, fungi, lichens, and insects) as well as for some bird specialists. In taiga, deadwood (especially larger than 30–40 cm in a diameter) also plays the key role in natural regeneration of spruce. In intact forests in European Russia, the volume of deadwood could reach 50 to 200 cubic meters per hectare. When planning management and during all types of forestry operations it is necessary to keep in mind how to ensure the continuity of the cycle of deadwood in forest. Therefore during harvesting large snags and down deadwood shall be retained. Hanging and dying trees and snags greater than 30–40 cm in a diameter that create a safety hazard at forestry operations shall be cut down and left as deadwood. If technically feasible (e.g. timber harvesters are used), dangerous trees should be felled at the height of 4–6 m above the ground, leaving high stumps. Some residual trees left on clearcuts as key stand elements and to ensure the patchiness of forest environment could be later wind thrown due to canopy thinning and decline of trees, thus increasing the volume of deadwood.

Of special significance as the key habitats are canopy gaps formed by individual downed trees and their groups and associated mound-and-pit microtopography.

Old growth cavity trees are used as nests by large birds, bats, and mammals. Retention of clumps of old deciduous trees (aspens and birches) provides more effective natural regeneration of conifers. Retention of individual trees (e.g. noble broadleaf trees (oak, ash, elm, maple, linden, and alike), Siberian pine, and Siberian larch in European Russia) enables more effective biodiversity

conservation not only of woody species, but also plants, fungi and animals dependant on them. Clearcutting of all trees in swamps and wet forests leads to continuous paludification of harvest areas and delays regeneration.

In order to ensure conservation of rare, threatened, endangered, vulnerable, and care-demanding species during clearcut (especially for harvest areas greater than 5 ha or wider than 100 m or when at least by one of its sides borders with non-forested area), retention of windthrow resistant and not creating safety hazard at forestry operations key stand elements (trees and their groups) is required. In overall up to 10–20% of the pre-harvest growing stock could be retained. Residual trees could be seed trees of target species; some old non-target broadleaf trees; trees with large bird nests, large cavity trees; veteran trees whose age noticeably exceeds the average age of the main canopy; tree species rare in this area (it is better to leave them together with groups or clumps of other trees); and large wind resistant dying trees and snags located at the distance from roads, landings etc. as well as such trees left within clumps and groups and deadwood as high stumps.

At areas with a high groundwater table and areas next to wetlands, it is recommended to leave residual windthrow resistant trees to ensure partial preservation of the stand transpiration capacity.

The legality for retention of the key stand elements can be justified by the presence of rare, threatened, and endangered species of flora and fauna (even though these species could be not so rare and threatened in a particular area but rather serve as indicators of the high value of the biotope).

Some ecologically valuable trees can be also retained as individual trees, inside the groups and clumps of seed trees as well as other non-exploitable areas (NEP) in consistence with the Timber Harvesting Regulations (2007). See further *Preservation and Maintenance of Ecological Functions and Values during Harvesting*.

Preservation and Maintenance of Ecological Functions and Values during Harvesting

FSC **Criterion 6.3** says that: “Ecological functions and values shall be maintained intact, enhanced, or restored, including:

- a) Forest regeneration and succession,
- b) Genetic species, and ecosystem diversity,
- c) Natural cycles that affect the productivity of the forest ecosystem.”

In terms of implication on planning and forestry operations, this means that harvesting shall be done considering natural landscape borders and mimicking the natural dynamics (e.g. fire or non-fire) wherever it is possible. Imitation of the natural stand dynamics at harvesting operations a major component of ecologically adaptive forest management. According to this system, the choice of harvesting techniques should to a maximum extent mimic peculiarities of natural dynamics of a particular forest type and consider its composition and structure. For example, when harvesting in evenaged dark coniferous (spruce and fir), temperate coniferous–broadleaf and hardwood forests, which develop in the absence of fires (or other stand-replacing disturbances), the preference shall be given to selection cuts. In dark coniferous stands with expressed tree generations, narrow clear-strip cuts, shelterwood (multistage) harvesting and small-size clearcuts can be used. (Note that hardwoods here mean consisting of noble broadleaf species like oak, ash, maple, elm, and linden). Within the framework of this approach it is not recommended to imitate natural catastrophic events, such as catastrophic stand-replacing fires. Therefore, the rationale for the use of clearcuts shall be provided and harvesting shall include biodiversity conservation measures. Thus, in coniferous and mixed coniferous–broadleaf stands with fire dynamics, seed trees in numbers sufficient to provide natural regeneration, pole-size trees, key stand elements, and key habitats (e.g. small bogs, forest strips along the streams etc., see above) shall be left untouched.

Since the switch to ecologically adaptive forest management requires some time to accumulate the necessary knowledge and experience, the applicant shall develop a special program for introducing such harvesting techniques. Nonetheless, the forest manager shall immediately undertake measures to reduce an adverse impact of the use of large-size clearcuts (greater than 30 ha) with

retention of only non-viable pole-size trees, which leads to a significant delay of coniferous regeneration. The set of such measures includes:

- identification and preservation of critical habitats (key habitats) – sites of high conservation value (see above the section on *Identification and Protection of Habitats of Rare, Threatened, and Endangered Species of Plants, Animals, and Fungi*);
- tree retention to preserve the diversity of the forest ecosystem and the patchiness of habitats (see above the section on *Preservation and Maintenance of Ecological Functions and Values during Harvesting*);
- the use of techniques aimed at natural forest regeneration; and
- the use of machinery and practices that minimize the impact on soil and young growth and pollution of forest, soil and water resources.

The Timber Harvesting Regulations (2007) (item 8, subitem d) permit leaving compact forest patches at areas where logging has not been yet started if they occupied less than 10% of the harvest area. In addition: “10. During harvesting of timber species listed in the Red Data Book of the Russian Federation and red data books of the administrative regions of the Russian Federation, as well as their habitats shall be preserved.

11. Viable trees of valuable tree species (oak, beech, ash, Siberian and Korean pines, linden, hornbeam, alder, and elm) shall be retained at harvest areas when they grow at the limits of their natural range of occurrence (when the relevant species occupy less than 1% of the area of a forest management unit (lesnichestvo or lesopark).

12. No harvesting of mature and overmature forest stands, in which Siberian and Korean pines constitute 30% and more of the overall growing stock, shall occur.

13. To ensure biodiversity conservation during timber felling, individual valuable trees can be preserved in any forest layer if this does not create problems for further regeneration of forest at a harvest area”.

In consistence with item 21 non-exploitable areas (NEP) can be designated in designing harvest areas. Such areas may include:

- a) non-forest patches (bogs, clearcuts, openings in the forest etc.) independently of their size;
- b) designed seed clumps and strips;
- c) patches of young and middle-aged stands dispersed among mature stands;
- d) patches of undermature stands less than 1 ha in size located within mature and overmature stands; and
- e) areas with presence of natural objects having conservation value.

NEPs can be also designated according to the above criteria during harvesting of timber if such areas had been overlooked earlier. In this case the respective changes shall be made to harvest documents.

According to the *Water Code* (Article 65) “Water protective zones and coastal protective strips”: “... 4. The width of the water protective zone of river or stream is established starting from their source to the mouth depending on river length:

- 1) 50 m for rivers under 10-km long;
- 1) 100 m for rivers from 10 to 50-km long;
- 1) 200 m for rivers over 50-km long.

5. For rivers and streams with the length less than 10 km from the source to the mouth, a water protective zone coincides with a coastal protective strip. The radius for the water protective zone around the source is equal to 50 m.

6. The width of the water protective zone of the lake or reservoir, except lakes inside bogs and lake or reservoir with area less than 0.5 sq. km equals to 50 m.

7. The width of the water protective zone of the Lake Baikal is established by the Federal law No. 94-FZ as of May 1 1999 *Protection of the Lake Baikal Act*.

8. The width of the water protective zone of seaside equals to 500 m.

9. Water protective zones along main and secondary channels coincide with the land designated for their construction.

11. The width of the coastal protective strip depends on the slope gradient near the water body and is equal to 30 m for backwards and zero slopes, 40 m for slopes under 3 degrees and 50 m for slopes over 3 degrees.

12. For stagnant and non-stagnant lakes and respective streams located inside wetlands the coastal protective strip equals to 50 m.
13. The width of the coastal protective strip of lakes and reservoir having significance for fisheries (spawning grounds, sites of fattening and wintering of fish and other aquatic biological resources) equals to 200 m independently of the slope of adjacent lands.”

The evaluation of the efficiency of biodiversity conservation measures can be tested by analyzing the population dynamics of rare, threatened, and endangered species (especially of those whose habitats rapidly disappear due to management activities, e.g. old growth forests and rare plant communities), species sensitive to changes in the environment (e.g. endemics) and species occurring at the limits of their natural range (e.g. oak, ash, maple, linden, and elm in the taiga zone in European Russia).

The dynamics of flora and fauna can be also assessed looking at the status of the population of so called umbrella and key species (see *Annex G. Glossary*).

The presence of a viable population of an umbrella species means that conditions also favor populations of most of wildlife occurring within the area. The examples of umbrella species are large predators (wolf and bear) and hoofed animals (forest reindeer). However, sometimes specialist could use some insects as umbrella species.

Keystone species play the key role in creating favorable conditions (habitats) for all associated species. Such species could be represented by species strongly or continuously transforming the environment: very large ungulates (European bison) and beavers. The abundance of large trees of Siberian or Korean pines, oak, and some other species would guarantee preservation of large complexes of species associated with them.

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Central Federal District

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Northwestern Federal District

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Southern Federal District

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Volga Federal District

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50. Red Data Book of the Middle Urals (Sverdlovsk and Perm oblasts): Rare and Threatened Species of Animals and Plants [*Krasnaya kniga Srednego Urala (Sverdlovskaya i Permskaya oblasti): redkie i ischezayushchie vidy zhitovnykh i rasteniy*]. Eds. V.N. Bolshakov and P.L. Gorchakovskiy. Yekaterinburg: Izd. Uralsk. Univ., 1996. 280 p. (In Russ.)
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52. Red Data Book of the Republic of Bashkortostan. Vol. 2. Bryophyta, Alga, Lichens, and Fungi [*Krasnaya kniga Respubliki Bashkortostan. Vol. 2. Mokhoobraznye, vodorosli, lishainiki i griby*]. Ed. A.I. Solomesh. Ufa: Tabigat, 2002. 104 p. (In Russ.)
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Ural Federal District

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Siberian Federal District

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Far Eastern Federal District

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Annex D. Protected Nature Areas

FSC **Criteria 7.1** and **5.6** require from the forest managers to know the borders of protected nature areas (PNA), as well as to take into account the relevant restrictions on forest management applicable to them when planning felling operations.

Thus, **indicator 7.1.13** demands: “The forest management plan describes how results of the environmental impact assessment at the landscape level associated with the presence of HCVF, representative samples of existing ecosystems, habitats of rare, threatened, and endangered species, and other key habitats (see 6.2 and 6.4), and sites of special significance for local people with regard to recreation, cultural and religious life, hunting, fishing, and the use of other non-timber forest products are incorporated”, while **indicator 7.1.17**: “The forest management plan contains maps showing relative position and correspondence of different types of protected sites, including protected areas, representative samples of existing ecosystems, and HCVF (see also 6.4 and 9.1)”.

Indicator 5.6.2 demands: “The following volumes of timber are excluded from the applicable annual allowable cut:

- harvesting of which is prohibited or restricted by the regime of protected sites;
- harvesting of which is permitted but would not be possible due to their economic inaccessibility or insufficient growing stock (economically inaccessible forests).”

PNA are now considered as a subcategory of high conservation value forests **HCV 1.1** (see *Annex E*). PNA sometimes may occur in a lesnichestvo (district level forest management administration unit) or even within the lease areas being certified. It should be mentioned that as a rule PNA are not given into lease for forest use (especially for commercial harvesting), nevertheless it is not directly prohibited by law. Some forests that seek FSC certification could contain candidate protected areas. Furthermore, some lands within the applicant’s area can be reserved for establishment of a PNA.

Sometimes it is not easy to find official information about candidate protected areas, especially at the regional level, because of the complicate and multi-stage procedure of their establishment.

Table D1 lists candidate zapovedniks (strict nature reserves) and national parks in forest and forest–steppe zones of the Russian Federation to be created in 2001–2010 according to the Decree by the government of the Russian Federation as of May 23 2001 No. 725-r.

The Table D2 lists decisions by regional administrations available in the reference legal systems to establish new PNAs and to reserve lands for them. Information on existing and candidate PNAs shall be requested from lesnichestvos, regional administrations and regional forestry agencies.

The applicant for FSC certification, which has PNA and/or lands reserved for their establishment within the area of its operations, should take into account the following recommendations when making decisions regarding forest management restrictions in such areas:

1. In legally established federal, regional, and local PNA, all logging operations, building of forest roads and other communications, placement of timber landings, oils and lubricants, forest vil-lages and temporary loggers camps shall not take place, if prescribed by management restrictions of the relevant PNA.
2. In the rest of the PNA, lands reserved for their establishment, as well as in areas included into federal and regional lists (schemes, programs) of the development of PNA approved by the relevant federal and regional authorities, harvesting of timber can be done only using methods that ensure preservation of the most valuable nature objects and their high conservation values. The same refers to planning and building of forest roads and other communications, as well as placement of any elements of infrastructure.
3. For areas for which there are official and justified proposals on establishing PNA prepared by scientific, non-governmental, and state environmental organizations, logging and road building shall be carried out only upon conduction of special field surveys with participation of organizations, which developed relevant proposals. These surveys shall specify conservation values of the forest, identify the permissibility of logging operations in it and help to negotiate with the stakeholders plans for forest management and infrastructure development in these forests.

Table D1. List of candidate zapovedniks (strict nature reserves) and national parks in forest and forest–steppe zones of the Russian Federation to be created in 2001–2010 (with changes)

Location	Name	Area, thou. ha	Brief characteristic
Zapovedniks (Strict Scientific Nature Reserves)			
Altay Republic	Sailyugemskiy	241	Unique mountain taiga landscapes of the Southern Altay, the Saylyugem Range
Krasnodar Krai	Utrish	5	Dry subtropical natural complexes at the Black Sea coast of the Caucasus
Leningrad Oblast	Ingermanlandskiy	14.2	Islands and waters in the eastern Gulf of Finland, the Baltic Sea
Novosibirsk Oblast	Barabinskiy	15	Forest–steppe nature complexes of the Barabinskaya lowland near the Chany Lake
Orenburg Oblast	Shaytan-Tau	9.5	Forest–steppe nature complexes and Shaytan-Tau Range
Stavropol Krai	Stavropolskiy le-sostepnoy	19	Natural steppe and forest complexes in ravines, outskirts of the Stavropol Uplands and Strizhament and Bryk mountains
Tomsk Oblast	Yuzhnotaehzny pikhtovy	83	Southern taiga nature complexes of the Western Siberian plain
National Parks			
Arkhangelsk Oblast	Onezhskoe pomorye	300	Virgin northern taiga complexes on the Onega peninsula
Bryansk Oblast	Pridesnyanskiy	104	Desna floodplain coniferous–broadleaf forests and landscapes
Chuvash Republic	Zavolzhye	32	Nature complexes on the Volga's left bank, picturesque forest lakes, medicinal sapropelic mud and sources of drinking medicinal waters
Khabarovsk Krai	Shantarskie ostrova	512	Island and marine ecosystems of the Shantar archipelago and waters of the Sea of Okhotsk
Ulyanovsk Oblast	Sengileyevskie gory	50	Picturesque forests on the shores of the Kuybyshev reservoir

Table D2. Available regional legal decisions on candidate protected areas and on reservation of lands for them

Region	Name of Document
Central Federal District	
Tver Oblast	Decree of the administration of Tver Oblast as of March 21 2003 No. 71-pa <i>To reserve lands in the vicinity of Tver State University's Botanical Garden</i>
Voronezh Oblast	Decree of the administration of Voronezh Oblast as of October 25 2000 No. 1001 <i>To develop the network of protected nature areas</i>
Yaroslavl Oblast	Decree of the governor of Yaroslavl Oblast as of June 1 1998 No. 358 <i>To develop a system of protected nature areas of Yaroslavl Oblast</i>
Northwestern Federal District	
Murmansk Oblast	Decree of the government of Murmansk Oblast as of February 27 2003 No. 53-pp/4 <i>To reserve lands for creating the state complex nature zakaznik [reserve] Laplandskiy les</i>
Republic of Karelia	Decree of the head of the government of the Republic of Karelia as of November 4 1996 No. 938 <i>To reserve lands for establishing national parks in Suoyarvi, Muyezero, and Kalevala national regions and in the town of Kostomuksha of the Republic of Karelia in 1996–2000</i>
Volga Federal District	
Chuvash Republic	Decree of the government of Chuvash Republic as of June 22 1993 No. 180 <i>To develop the protected nature areas network in the Chuvash Republic</i>
Orenburg Oblast	Law of Orenburg Oblast as of November 9 2004 No. 1534/260-iii-OZ <i>To reserve lands at the territory of Orenburg Oblast</i>
Perm Oblast	Decree of the governor of Perm Oblast as of August 1 2001 No. 188 <i>To reserve lands for establishing protected nature areas in 2001–2015</i>
Republic of Bashkortostan	Decree of the government of the Republic of Bashkortostan as of October 1 2002 No. 293 <i>To reserve lands for establishing protected nature areas in the Republic of Bashkortostan</i>
	Decree of the government of the Republic of Bashkortostan as of January 29 1997 No. 74-r. Note: <i>Target program for establishing and developing the protected nature areas network in the Republic of Bashkortostan for 1997–2000</i>

Russian National FSC Standard

Region	Name of Document
Republic of Tatarstan	Decree of the president of the Republic of Tatarstan as of January 22 2004 No. UP-26 <i>To reserve lands in the Republic of Tatarstan</i>
	Decree of the government of the Republic of Tatarstan as of October 13 2000 No. 730 <i>To reserve lands for establishing protected nature areas</i>
	Decree of the government of the Republic of Tatarstan as of January 18 1996 No. 22 <i>To preserve and develop the protected nature areas network in the Republic of Tatarstan</i>
Ural Federal District	
Khanty–Mansi Autonomous Okrug	Decree of the government of Khanty–Mansi Autonomous Okrug as of September 20 2002 No. 519-p <i>To approve the land planning project for the Samarovskiy Chugas nature park and to reserve lands (sites) for its establishment</i>
Kurgan Oblast	Decree of the administration (government) of Kurgan Oblast as of June 6 2000 No. 381 <i>On reserving lands where the lakes Gorkoe, Zemkovo, Sukhanovo, and Mironovskoe of Kurtamyshskiy district are located to subsequently award them with a status of medicinal and healing territories</i>
Tyumen Oblast	Decree of the governor of Tyumen Oblast as of October 21 2002 No. 383 <i>On measures to identify and reserve lands for regional level protected nature areas.</i> Note: Sketch map of developing a system of protected nature areas of regional significance in Tyumen Oblast over the period of 2002–2005
	Decree of the administration of Tyumen Oblast as of February 20 2004 No. 50 <i>On amendments to the development and location scheme of the system of regional level protected nature areas in Tyumen Oblast</i>
Siberian Federal District	
Altay Republic	Decree of the administration of Altay Krai as of April 6 2001 No. 251 <i>On development and location scheme of protected nature areas in Altay Krai</i>
	Decree of the government of Altay Republic as of August 18 2003 No. 225 <i>On the location and development scheme of protected nature areas in Altay Republic for the period up to the year 2010</i>
Krasnoyarsk Krai	Decree of the administration of Krasnoyarsk Krai as of February 12 1998 No. 86-p <i>On the development and location scheme of protected nature areas in Krasnoyarsk Krai for the period up to the year 2005</i>
	Decree of the administration council of Krasnoyarsk Krai as of July 11 2002 No. 252-p <i>To reserve lands for establishment of the regional level nature park Kanskoe Belogorye</i>
	Decree of the administration council of Krasnoyarsk Krai as of November 3 2004 No. 220-p <i>To reserve lands for establishment of the regional level biological zakaznik [reserve] Saratovskoye boloto</i>
	Decree of the administration council of Krasnoyarsk Krai as of February 28 2003 No. 54-p <i>To reserve lands for establishment of the regional level protected nature area Symskiy Nature Park</i>
	Decree of the administration council of Krasnoyarsk Krai as of May 20 2002 No. 158-p <i>To reserve lands for establishment of regional level natural zakazniks [reserves].</i> Note: <i>Reserving lands for establishment of protected nature areas of regional significance Gagul'skaya kotlovina, Tokhtay, and Kantegirskiy</i>
	Decree of the administration of Krasnoyarsk Krai as of June 21 2000 No. 467-p <i>To reserve lands for establishment of zakazniks [nature reserves].</i> Note: <i>Reserving lands for establishment of regional level protected nature areas Chadobetskiy, Kezhemskoye mnogoostrovye, and Dshembinskiy</i>
Novosibirsk Oblast	Decision of Novosibirsk Regional Council of Deputies as of December 18 1996 <i>On prospective scheme of development and location of the protected nature areas network in Novosibirsk Oblast</i>
Omsk Oblast	Law of Omsk Oblast as of November 9 2004 No. 563-OZ <i>On the regional target program Development of protected nature areas to protect game animals in Omsk Oblast up to the year 2010</i>
Far Eastern Federal District	
Koryak Autonomous Okrug	Decree of the administration of Koryak Autonomous Okrug as of March 30 2004 No. 95 <i>To reserve forest lands for a protected nature area in Koryak Autonomous Okrug.</i> Note: <i>Reserving lands for establishing the forest zakaznik [reserve] of district significance Severno-Ayankinskiy listvenichno-redkolesny</i>
Sakhalin Oblast	Law of Sakhalin Oblast as of October 2 2000 No. 214 (edited on June 23 2003 No. 414 and December 31 2003 No. 462) <i>On development of protected nature areas in Sakhalin Oblast</i>

Some areas within the existing and planned PNA may have conservation attributes that meet the criteria of high conservation value forests (**FSC Principle 9**). Such areas could be also treated as representative samples of existing ecosystems (**Criterion 6.4**). Thus, **Criterion 6.4** requires: “Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources” (see further *Annex E*).

Annex E. High Conservation Value Forests

Categories of HCVF

Principle 9 of *FSC Principles and Criteria for Responsible Forest Stewardship* “Maintenance of high conservation value forests” has been formulated by FSC in its current form in 1999 after the revision of the standards. The implementation of this principle requires from forest managers that “Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach”.

FSC considers high conservation value forests those that possess one or more of the following attributes:

- a) forest areas containing globally, regionally or nationally significant:
 - concentrations of biodiversity values (e.g. endemism, endangered species, refugia) (**Category HCV 1**); and/or
 - large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance (**HCV 2**);
- b) forest areas that are in or contain rare, threatened or endangered ecosystems (**HCV 3**);
- c) forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control) (**HCV 4**);
- d) forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) (**HCV 5**) and/or critical to local communities’ traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities) (**HCV 6**).

Currently, the HCV categories are further subdivided to subcategories (Jennings *et al*, 2005):

HCV 1. Areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia):

HCV 1.1. Protected nature areas.

HCV 1.2. Threatened and endangered species.

HCV 1.3. Endemic species.

HCV 1.4. Critical temporal use.

HCV 2. Globally, regionally or nationally significant large landscape level areas where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance (*no further subdivision*).

HCV 3. Areas that are in or contain rare, threatened or endangered ecosystems (*no further subdivision*).

HCV 4. Areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control):

HCV 4.1. Forest critical to water catchments.

HCV 4.2. Forest critical to erosion control.

HCV 4.3. Forest providing barriers to destructive fires.

HCV 5. Areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) (*no further subdivision*).

HCV 6. Areas critical to local communities’ traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities) (*no further subdivision*).

HCV 1: Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia)

The National FSC Standard interprets the category **HCV 1** (first part of the article a)) as “a territory (ecoregion) characterized by globally or nationally significant concentrations of biodiversity values and/or contains other objects with high biodiversity (protected areas, important bird areas, wetlands of international importance etc.)”.

At the **global level** the standard considers as **HCV 1** areas of the WWF’s map of the Global 200 ecoregions (Olson and Dinerstein, 1998) – the list of the 233 globally most biologically outstanding habitats. The list of such ecoregions is the result of regional analyses of biodiversity across the Earth’s continents and oceans. The ecoregions were selected for all major types of terrestrial, freshwater and marine habitats (MHT). Overall 26 such MHT has been described. Each MHT was separately analyzed for seven biogeographic realms. Finally, ecoregions that represented the most distinctive examples of biodiversity for a given major habitat type were identified within each biogeographic realm (Russia refers to the Palearctic). They were chosen based on the following parameters:

- species richness;
- endemism;
- higher taxonomic uniqueness (e.g. unique genera or families, relict species or communities, primitive lineages);
- extraordinary ecological or evolutionary phenomena (e.g. extraordinary adaptive radiations, intact large vertebrate assemblages, presence of migrations of large vertebrates); and
- global rarity of the major habitat type.

Only the biodiversity value of ecoregions sharing the same major habitat type were compared because the relative magnitude of parameters such as richness and endemism varies widely among them. Each selected WWF Global 200 ecoregion (further referred to as “WWF ecoregion”) can be constituted by several ecoregions representing one of the MHT (i.e. terrestrial, freshwater and marine ecoregions).

Of the WWF ecoregions occurring in Russia, the following ones closely relate to forest ecosystems:

- Russian Far East Temperate Forests (WWF ecoregion code is **71**), which include the terrestrial ecoregions Ussuri broadleaf and mixed forests (terrestrial ecoregion code is **PA0443**) and South Sakhalin–Kurile mixed forests (**PA0438**);
- European–Mediterranean Montane Mixed Forests (**77**), which include the terrestrial ecoregion Crimean Submediterranean forest complex (**PA0416**), whose Russian part is represented by northwest flanks of the Caucasus;
- Caucasus–Anatolian–Hyrcanian Temperate Forests (**78**), which include the terrestrial ecoregion Caucasus mixed forests (**PA0408**);
- Altai–Sayan Montane Forests (**79**), which include the terrestrial ecoregions Altay montane forest and forest steppe (**PA0502**) and Sayan montane conifer forests (**PA0519**);
- Ural Mountains Taiga (**83**);
- Eastern Siberian Taiga (**84**);
- Kamchatka Taiga and Grasslands (**85**), which include the terrestrial ecoregions Kamchatka–Kurile meadows and sparse forests (**PA0603**), Kamchatka–Kurile taiga (**PA0604**), and Kamchatka Mountain tundra and forest tundra (**PA1105**); and
- Fennoscandia alpine tundra and taiga (**115**).

In addition, there are two freshwater WWF ecoregions, whose existence significantly depends on forests on their basins.

- Russian Far East Rivers and Deltas (**181**) (although this ecoregion mainly consists of water bodies, which are partially included in the Ussuri broadleaf and mixed forests WWF ecoregion);
- Lake Baikal (**184**), which is partly included in the Eastern Siberian Taiga and Altai–Sayan Montane Forests WWF ecoregions.

More detailed characteristics of these ecoregions can be obtained on the site http://www.panda.org/about_wwf/where_we_work/ecoregions/ecoregions.cfm, as well as http://www.nationalgeographic.com/wildworld/profiles/g200_index.html.

For the WWF ecoregions indicated above the following data on their natural values and guidelines for their identification and preservation should be used.

In the **Russian Far East Temperate Forests WWF Ecoregion** (Primorskiy Kray, Khabarovsk kray and Jewish Autonomous Oblast) “*Methodical Guidelines for Identification of Special Protection Forest Habitats in Habitats and Sites of Occurrence of Rare and Protected Species of Animals and Plants, as well as of Valuable Game Animals in Forest of the Southern Russian Far East*” prepared by Far Eastern Forestry Research Institute (DalNIILKh) in 2006 shall be observed.

In Primorskiy Kray, conservation of HCVF according to the publication “*Mapping High Conservation Value Forests of Primorskiy Kray, Russian Far East: Categories Important for Preservation of Flora and Vegetation*” (Aksenov *et al.* 2006) shall be ensured. Habitats of rare, endangered, and threatened plants shall be identified and preserved in accordance to the recommendations in the “*Practical Guidebook for Forest Workers of Primorskiy Kray*” (Skvortsov *et al.*, 2006).

In the **Altay–Sayan Montane Forests WWF Ecoregion** (republics of Altay, Buryat, Tuva and Khakassia, Altay and Krasnoyarsk krays, and Irkutsk and Kemerovo oblasts), candidate protected areas listed in the protected nature areas development plan *Econet of the Altay–Sayan Region* (2001) shall be protected; maps of intact forest landscapes shall be also taken into account (Aksenov *et al.*, 2003).

In the **Ural Mountains Taiga WWF Ecoregion** (Komi Republic (in part), Perm Kray (in part), Sverdlovsk, Tyumen, Orenburg, and Chelyabinsk (in part), and Republic of Bashkortostan), materials of the inventory of intact forest landscapes shall be taken into account (Aksenov *et al.*, 2003).

In the Republic of Bashkortostan, protection of candidate areas included into the *Concept of the Protected Nature Areas in the Republic of Bashkortostan* (approved by the order of the Government of the Republic of Bashkortostan No. 209 as of September 1 2003) and Ecological Network of the Republic of Bashkortostan (Pazhenkov *et al.* 2005) shall be ensured.

In Komi Republic, materials of the inventories of pristine forests (devstvennyye lesa) shall be considered (Pristine forests..., 2004).

The **HCV 1.1** subcategory includes protected areas as well as official candidate areas (see *Annex D*).

Areas being identified under the umbrella of various international programs also fall under criteria of the **international level HCV 1** (see below Ramsar wetlands of international importance and important bird areas).

The FSC standard for controlled wood (*FSC-STD-40-005 (V2-0) EN*) also considers as **international level HCV 1** global biodiversity hotspots (areas with high biodiversity that is threatened) identified by the Conservation International. Globally, Conservation International has identified 25 such areas (see <http://www.biodiversityhotspots.org/xp/Hotspots/>). The identification criteria included the total number of species occurring in the area, the number of endemic species present only in ecosystems of that area and the degree to which that area is threatened. Within Russia occurs part of the Caucasus hotspot represented by the ecosystems of the Northern Caucasus, which include the respective WWF Global 200 Ecoregions Nos. 77 and 78. Under the aegis of Conservation International a special foundation *Critical Ecosystems Partnership Fund* (CEPF) has been established, whose aim is to identify areas, which require special conservation measures, and to collect information on their biodiversity.

There are no jet common criteria for the **national and regional level HCV 1**. There are also no readily available maps that show location of such areas. Therefore, the decision shall be taken on a case by case basis using wide scale stakeholder consultations and involving knowledgeable experts.

As basis for such analysis we propose to use national and regional red data books and scientific publications. There are a number of programs aimed at identification of internationally biologically valuable nature sites using a variety of criteria, for example:

- Important Bird Areas (IBA, or KOTR in Russian), the program by Birdlife International and its Russian affiliate Russian Bird Conservation Union);
- Important Plant Areas in Europe (program by World Conservation Union–IUCN);
- Ramsar wetlands (according to the *Convention on Wetlands of International Importance, Especially as Waterfowl Habitat*).

The designation of the important bird areas (IBAs) is the program being implemented by Russian Bird Conservation Union since 1994. Its international component is part of the global program on important bird areas (IBAs) by the Birdlife International, which has been developed in the 1980s. The Important Bird Areas are sites, which are of importance for birds because they use them as breeding and staging sites, wintering grounds, and migratory bottlenecks. In the first turn they include:

- Sites that regularly hold significant numbers of a globally threatened species.
- Sites with relatively significant numbers of other rare or vulnerable species (subspecies or populations), including those listed in the international, Russian, and regional red data books.
- Sites that hold a significant assemblage of endemic species or the species whose breeding distributions are largely or wholly confined to one biome.
- Sites that have exceptionally large numbers of migratory or congregatory species.

These are the most critical habitats of land and water surface, whose preservation will bring a maximum conservation effect for particular species, subspecies or geographic populations of bird species. The area can be recognized as an IBA based on quantitative criteria developed by the Birdlife International, which are the same within large regions. In Russia there are three such regions: 1) European Russia; 2) Western Siberia (from the Ural mountains to the Yenisey River); and 3) Eastern Siberia and the Far East. IBAs can be identified at international, national, and regional levels.

As of 2006 more than 1100 IBAs of different levels have been described in Russia, 700 of them belonging to the international level. Information on 218 IBAs of European Russia and 170 IBAs of Eastern Asian Russia are included in European (Important Birds Areas in Europe..., 2000) and Asian (Important Birds Areas in Asia, 2004) catalogs of IBAs of international importance. Presently, considering already published volumes on the IBAs in European Russia and Western Siberia (Important Bird Areas of International..., 2000; 2006), the first stage of the inventories of IBA of international importance has been completed. These publications contain criteria for IBA identification, lists of bird species and information on a particular IBA, including proposed management methods. Information on IBAs in Eastern Siberia and the Russian Far East collected by the Russian Bird Conservation Union has not been yet published. The second stage presumes protection of identified IBAs and a gap analysis to learn whether the identified IBAs are sufficient to provide conservation of a particular bird species. Such data will be used to complete IBA inventory. IBAs shall be treated as candidate protected areas.

As a result of the implementation of the Ramsar Convention, there are 35 wetlands of international importance, especially as waterfowl habitat, in Russia (Wetlands of International..., 1998). However, inventories of valuable wetlands are not completed. Specialists estimate that there are at least several thousand such sites in Russia, each of those with an area ranging from several tens to several hundreds of million hectares.

Two groups of criteria have been proposed for identification of Ramsar wetlands:

- reference, rare or unique wetlands;
- wetlands of international importance for biodiversity conservation.

A decision to grant such status to a wetland is taken by the Government of the Russian Federation if the Secretariat of the Convention decides that the area nominated meets the relevant criteria in accordance with the established procedure. The regime of such an area is specified in a Certificate of Wetland adopted by the regional administration. These statutes have not been adopted on time for all wetlands. If Ramsar wetlands are established within the existed protected areas, their regimes already include land use restrictions. However, the effective implementation of the Convention may require stricter restrictions (e.g. for many protected areas that have less strict regimes) or introduction of them. To ensure the implementation of the convention, wetlands of national and

local importance shall acquire the respective status, while sites of all three categories shall become protected areas.

Each signatory country shall prepare a shadow list of Ramsar wetlands to be included into the convention. In Russia such a “shadow list”, which includes 166 areas, has been developed by the experts of the All-Russia Research Institute for Nature Conservation on a request from the former Committee for Environment Protection of the Russian Federation (Wetlands on the Shadow List..., 2000).

HCV 2: Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance

The National FSC Standard interprets the category **HCV 2** (second part of the article a)) as a forest area that “is part of a large forest landscape minimally disturbed by human agency (or contains such a landscape)”.

Currently the most fully the **category HCV 2** at the **international** and **national levels** corresponds to the concept of intact forest landscapes – the term proposed by Global Forest Watch. The detailed maps of such areas can be found in the *Atlas of Russia’s Intact Forest Landscapes* (Aksenov *et al.*, 2002; 2003; <http://www.forest.ru/rus/publications/intact/>). More details about peculiar ecological features of these forests, their conservation values as well as the identification methods can be found in *The Last Intact Forest Landscapes of Northern European Russia* (Yaroshenko *et al.*, 2001a; 2001b). A similar approach to identification of large forest landscapes is used in the FSC Boreal Standard for Canada – the country closest to Russia in terms of its natural conditions.

Within the context of this research, an intact forest landscape is understood as a landscape in the forest zone greater than 50 thousand hectares that is whole and natural, undivided by infrastructure and almost entirely unaffected by human activities. It is large enough to support viable populations of large predatory vertebrates and keep most of the territory free of edge effects. It typically contains a mosaic of ecosystems (i.e. it is more than a forest) and has a natural fire regime.

There are no common criteria of **HCV 2** at the **regional level**. However, it is clear that properties and minimum size of such forests may differ from those adopted at the **national level**, and the decision shall be made in each particular case based on wide scale stakeholder consultations.

The priority of protection intact (low-disturbed) areas is stated in the Article 4 of the Act on Environment Protection: “Priority in protection shall be given to natural ecological systems, natural landscapes and natural complexes, which have been unaffected by human agency.”

HCV 3: Forest areas that are in or contain rare, threatened or endangered ecosystems

The National FSC Standard interprets the category **HCV 3** as a “*forest area that contains rare, threatened or endangered ecosystems*”. Rare, threatened or endangered ecosystems are ecosystems that are rare (i.e. overall occupy insignificant area in a particular landscape, region, natural zone or globally) due to various reasons (e.g. the uniqueness of natural and historical conditions of development or the results of human agency). There are no common criteria for identification of such ecosystems, neither national lists nor the lists of respective areas. For some regions criteria and lists of areas may exist, which should be taken into account during certification. When such developments are absent, rare ecosystems shall be interpreted as rare forest communities, in particular those that are at the range of their occurrence in a particular region (e.g. hardwoods with noble broadleaf trees in the taiga zone).

The following incomplete list of rare forest ecosystems can be recommended:

- all over European Russia maple and ash forests, as well as forests with significant admixture of oak;
- all over European Russia any forests with larch in the main canopy and/or undergrowth;
- all over European Russia and the Urals dark coniferous (spruce, fir, spruce–fir) forests with nemoral herbaceous plants (*Pulmonaria obscura*, *Lathyrus (Orobus) vernus*, *Milium effusum*, *Melica nutans*, *Paris quadrifolia*, and *Stellaria holostea* – not less than three species simultane-

ously) and/or boreal tall herbaceous plants (*Aconitum spp.*, *Cacalia hastata*, *Ligularia sibirica*, *Delphinium elatum*, *Diplazium sibiricum*, *Actaea spp.*, *Cicerbita uralensis*, *Atragene sibirica*, *Bupleurum aureum*, *Lilium pilosiusculum*, *Paeonia anomala*, *Pleurospermum uralense*, *Veratrum lobelianum*, *Crepis sibirica*, and *Senecio nemorensis* – not less than three species);

- all over Siberia intact black taiga – fir–aspen forests with tall herbaceous plants and a complex of relic nemoral plants (*Asarum europaeum*, *Asperula odorata*, *Sanicula europaea*, and *Sanicula giraldii*);
- in Western Siberia forest with admixture of elm, even as individual trees;
- in all regions old growth black alder forests; and
- in all regions mixed riparian forest dominated by poplar (any species).

For Primorskiy Kray and Amur region relevant scientific publication can be used (Krestov and Verkholat, 2003; Aksenov *et al*, 2006).

For Siberia as a starting point for developing the list of rare forest communities Green Book of Siberia can be used (1996).

HCV 4: Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control)

The National FSC Standard interprets the category **HCV 4** as the “*area that provide basic services of nature in critical situations.*”

From the practical standpoint, the purpose of this category is to identify those forests, whose state is critically important to maintain the integral ecological stability (functions) of the neighboring areas. Altogether there are four main aspects of such ecological stability:

- forests as unique sources of drinking water for local people (e.g. forested watersheds of reservoirs supplying potable water for cities);
- forests critical to water catchments by preventing flooding, droughts as well as controlling stream flow regulation and water quality;
- forests that provide terrain stability, including control of erosion, landslides, avalanches etc.; and
- forests providing barriers to catastrophic fires.

Areas with such forests can be found in different categories of protective forests and OZU designated in forests of all groups according the Forest Code, although some areas that meet criteria for such forests could not have any respective formal status.

The following categories of protective forests could be mentioned:

- forest in water protective zones;
- forest critical for erosion control;
- protective forest belts along federal, republican, and oblast level railroads and motorways;
- federal protective forest strips;
- ribbon-like pine forests;
- forests in desert, semidesert, steppe, forest–steppe and forest-poor mountain areas important for environmental protection;
- forests in green zones of settlements and park forests;
- forests of first and second zones of sanitary protection of water supply sources; and
- forests of first, second, and third zones of areas of sanitary (mountain sanitary) protection of resorts.

Parameters of OZU and guidelines on their identification (still effective under the new Forest Code) can be found in the order by the Russian Federal Forest Service as of December 30 1993 No. 348 *On Approval of Basic Guidelines for Establishment of Special Protection Forest Habitats*. OZU are identified based on the significance of forests, their location, functions, and technical and economical justification, using criteria and normative documents listed in the Table 1 of the aforementioned order. These parameters can be more detailed and specific in the particular administrative region of the Russian Federation.

In accordance to the Forest Code, forest management can be prohibited or restricted in protective forests categories and OZU.

HCV 5 and HCV 6: Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities)

In the National FSC Standard the categories **HCV 5** and **6** are unified and are interpreted as “areas that are of special significance for local communities, including religious, cultural, ecological or economic significance.” The identification of such areas is regulated by **Indicator 3.3.2**: “Sites of special cultural, ecological, economic or religious significance to indigenous peoples have been identified in cooperation with them.” Furthermore, **Indicator 9.1.5** says that in part not covered by **Indicators 2.2.3** and **3.3.2**: “It is determined whether the forest area being certified contains sites of special significance for local communities, including religious, cultural, ecological or economic significance (sites that local people regard as more significant when compared with surrounding forests).”

These HCV categories include various objects. Several uses of forest resources that are of special significance for local, including indigenous communities can be recognized (**HCV 5**).

Thus, in accordance to the federal and regional laws traditional land use areas (TLUA) can be established in lands of indigenous peoples. TLUA are a type of protected area and shall be considered as **HCV 1.1**.

The forest manager should also check who has the lease rights for game resources of the area (they may belong to some agricultural production cooperatives, indigenous community, society of hunters and fishermen etc.). Rights of these organizations can be confirmed by lease agreement.

Sometimes, hunters and fishermen may use forest resources without taking them into lease on the basis of customary rights. These people are often the former workers of enterprises that have disappeared or gone bankrupt during unstable economic conditions of the last decades. Justification of the rights of such people for traditional use of lands may demand consultations with experts.

Of a special value for local communities could be areas where they traditionally collect berries and mushrooms, hunt and fish. Forest can be considered as common land of the village. For example, collection of non-timber products often does not imply even informal documenting of land rights. In order to clarify such situations, local authorities (selsovet, formal community wide gathering of residents (skhod)) shall be contacted.

Indigenous representatives may claim lands, which have been traditionally used by their ancestors and where they want to resume traditional use of natural resources. The 20th century has been known for abundant enforced movements of people, while indigenous peoples' rights had been poorly documented in the past. As a result of that land claims of descendents of the people that lived in the area are difficult to prove. Therefore, in accordance to a globally adopted practice, such claims should be considered in relation to a local indigenous community. The matter of the claim may be assessed by experts in the field of ethnology.

For city and town residents green areas in the neighborhood are of significant importance, even though these zones sometimes do not belong to the area of a particular municipality. In this case the user of forest resources is the local community, whose interests could be represented by the local administration. According to the Forest Code such areas may fall under various categories of protective forests (e.g. forest in green zones of settlements and park forests, first, second, and third zones of the area of sanitary (mountain sanitary) protection of resorts, forests for collection of Siberian and Korean pine nuts (kernels) etc.), and OZU (e.g. forest habitats in the neighborhood of villages (priposlekovyye i zapolnye lesa) and of gardeners settlements (sadovodcheskie tovarishchestva)). Part of the areas that meet criteria for such forests may lack legal status. In addition, as HCVF can be considered sites of archeological and historical significance, war memorial sites, mass graves, cemeteries, churches, chapels, areas of former rural estates etc.

Sacred sites (sacred groves, trees, and springs, cult objects, burial sites etc.) are of great value for indigenous communities or ethnic groups (**HCV 6**). In many cases, economical or cultural significance of the forest for local people or indigenous groups can be many times higher than forestry.

Complete mapping of such forests is only possible in close cooperation with local people and indigenous communities and by taking into consideration their concerns and interests. Identification of sacred sites can be complicated by a number of reasons. For example, according to beliefs of some indigenous peoples a sacred site will lose its spiritual force after its location becomes known to other people. Therefore, mapping of such sites shall be done very carefully. More on indigenous peoples see *Annex F*.

HCVF, Representative Samples of Existing Ecosystems, and Ecological Networks

Criterion 6.4 requires that: “Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.” The purpose of this criterion is to create a network of protected sites (with prohibition or restriction of forestry operations), which are functionally interconnected and provide conservation of flora and fauna, landscapes, ecosystems, and habitats in the applicant’s area.

In practice this means that such a network shall:

- include all types of ecosystems and landscapes occurring in the area (i.e. to be representative);
- provide preservation of regionally and locally rare, threatened or endangered types of ecosystems and landscapes;
- ensure settling and migration of species; and
- serve a base for scientific research of natural processes in forests.

Existing and candidate protected areas, protective forests, relatively large special protection forest habitats (OZU), and areas voluntarily set aside by the enterprise (e.g. HCVF) may function as representative samples of existing ecosystems within the landscape.

While the aforementioned protected sites may constitute the majority of the network of representative samples of existing ecosystems within the landscape, they do not always include the full diversity of landscapes, ecosystems, and habitats. In such cases, the existing protected sites network shall be respectively extended. This is of special importance when the applicant’s area lacks protected areas and HCVF, or they are almost absent.

In order to create a network of representative samples of existing ecosystems, the applicant shall identify all types of protected sites (protected areas, protective forests, and OZU) and HCVF; conduct a gap analysis for representativeness of these sites with respect to the management area; and extend the protected sites network, by adding the ecosystems that are lacking.

Mapping and protection of representative samples of existing ecosystems largely overlaps with an idea to establish the Pan-European Ecological Network – the result of realization of the Pan-European Biodiversity and Landscape Strategy (PEBLS) (see *Annex B*). The Declaration of the 3rd Ministerial Conference “Environment for Europe” formulated its goal to promote nature protection, both inside and outside protected areas, by establishing the Pan-European Ecological Network – a physical network of the core areas and other respective formations linked by corridors and supported by buffer zones to make easier settling and migration of species.

The establishment of Pan-European Ecological Network shall promote achievement of the main goals of PEBLDS by solving the following tasks:

- to provide protection of the whole set of ecosystems, habitats, species and their genetic diversity as well as landscapes of European importance;
- to ensure that the habitats are big enough to create conditions favorable for species survival;
- to create necessary possibilities for settling and migration of species;
- to provide restoration of degraded components of the key systems and protection of the systems against potential threats.

The main idea of the concept of the ecological network is to avoid negative consequences of fragmentation of natural areas by enabling ecological links among them. According to the classical scheme of an ecological network, the latter shall have the following components:

- *core areas* to provide optimally achievable quality and quantity of ecological space to preserve the target object;
- *transit areas*, or *corridors* and *stepping stones* to provide necessary links among the core areas using linear elements of the landscape (proper corridors), fragments of habitats (stepping stones) or landscape matrix;
- *buffer zones* to protect the core and transit areas from potentially dangerous external effects; and
- *restoration zones* to provide restoration of one or another functional component of the ecological network.

An important remark is that in terms of spatial arrangement of protected nature areas, this system implies the use not only of legal norms but also of other possibilities, for example, economic stimuli, voluntary agreements with land owners etc. Therefore, the civil society, including land owners, local people, and nongovernmental organizations, play an inevitable role in the functioning of ecological networks.

Some regions could already have such an ecological network designed. This shall be taken into consideration when identifying HCVF and representative samples of existing ecosystems within the landscape as well as developing proposals on their management.

Management of HCVF

Under management of HCVF we understand the implementation of such a management regime (forestry and other activities) in HCVF that permits maintenance and even enhancement of the respective high conservation value. The management regime is a set of management restrictions and/or requirements during implementation of harvesting, silvicultural, and other activities.

Management of HCVF is covered in **Criterion 9.3**: “The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.”

This means that to ensure preservation of the identified HCVF, forest managers shall develop and thereafter implement a management regime, which is adapted to local conditions, available resources and existing knowledge.

Management system development in HCVF

A management regime for HCVF should be developed taking into account that any activity in HCVF shall:

- always be based on the precautionary approach to minimize the risk that any irreversible damage is done to these critical values;
- always be within a framework of adaptive management, i.e. by planning, implementation, monitoring of effects and where necessary re-planning on the basis of the analysis of the results of monitoring (Jennings *et al*, 2005).

The main options for management (according to Jennings *et al*, 2005) are:

- “*Protection* of the area, through reserves, buffer zones, marking boundaries and control of activities that degrade the HCV (e.g. hunting of rare species). Where doubt exists as to whether any of the other management options are able to maintain or enhance the identified HCVs, then, consistent with the precautionary approach, protection will be the preferred option.
- *Modifications or constraints on operations*, or specific operational prescriptions/systems. Any threats to the HCVs which will be posed by operations or other activities in the forest will need to be identified and documented. This analysis should include all potential effects, both direct (e.g. harvesting operations or use of chemicals) and indirect (e.g. increased hunting as a result of

better access along logging roads). The constraints that these threats will put on operations and other activities should also be examined. The decision to adopt any particular operation must be made based on the precautionary approach, which means that if you are not sure whether a particular activity might have a negative effect on a HCV, then you should assume that it will until you have collected information to prove that it does not. Examples of modified management regimes might include implementation of particular cutting cycles, retention of named species or maximizing notable habitat features such as areas suitable for nesting or feeding.

- *Restoration* activities where the forest area requires some remedial action, such as removal of alien species or enrichment of riparian functions”.

Precautionary Approach

At a current level of knowledge about forest ecosystems and their functioning nobody can be completely sure, which management regime better suits the aim of preservation of high conservation value in each particular case. Therefore, when developing a management regime for HCVF, the precautionary approach should be implemented. In practice this means the following:

“Planning, management activities and monitoring of the attributes that make a forest management unit a HCVF should be designed, based on existing scientific and indigenous/traditional knowledge, to ensure that these attributes do not come under threat of significant reduction or loss of the attribute and that any threat of reduction or loss is detected long before the reduction becomes irreversible. Where a threat has been identified, early preventive action, including halting any potentially detrimental action, should be taken to avoid or minimize such a threat despite lack of full scientific certainty as to causes and effects of the threat” (FSC Principle 9 Advisory Panel, 2000).

Management guidelines for different categories of HCVF

In all HCVF (with rare exceptions), the following activities could be permitted if they are legal:

- public access for recreational activities (without camping and fires);
- hunting and fishing; and
- collection of non-timber forest products (mushrooms, berries, medicinal plants and cones).

In all HCVF (with some exceptions), the following activities cannot be permitted:

- construction of long-lasting objects;
- installing of main communication lines;
- exploration and mining of mineral resources;
- alteration of the hydrological regime;
- activities implying high visitor pressure;
- use of chemical and biological control agents;
- use of fire (prescribed burning, burning of post-harvest residues etc.) with any goals; and
- introduction of exotic species.

The management regime shall correspond to the HCV category. Thus, in order to ensure conservation of biodiversity and landscape (**HCV 1–3**) it is recommended to implement stricter management restrictions (including strict conservation). Protective functions can be maintained only by modifying management activities. In general, for all **HCV 1, 3** and **6** prohibition of all or majority of harvesting and other silvicultural activities can be recommended. For **HCV 4** and **5**, commercial harvesting and other clearcuts shall be prohibited, in combination with additional management constraints. For **HCV 2**, prohibition of harvesting operations or zoning of the area (each zone may have its own management regime, although strict conservation zones are obligatory) can be recommended.

The management regime can be the same for the whole HCVF or vary depending on its zoning in accordance to high conservation values present and functions.

Currently, the following main options for management in HCVF may be recommended:

- announcement of a voluntary moratorium on any harvesting operation in the area and further promotion establishment of a protected area or reserving the land for a candidate area;
- establishment of protective forests and OZU; and
- canceling any lease for HCVF.

Creation of a protected area (either federal or regional ones) can be recommended for **HCV 1** (sometimes), **2** and **6**. Creation of OZU can be recommended for **HCV 1** (in most cases), **3**, **4** and **5**. During prolonging a lease agreement, it is advisable to exclude a large wilderness area from the lease (basically for **HCV 2**).

All HCVF, with some exceptions, require measures on fire prevention and fire management.

In the **international level HCV 1 (WWF Global 200 ecoregions)**. In the specified ecoregions the following is recommended:

9. during any timber harvesting:
 - a) trees, shrubs, and lianas prohibited for harvest by the federal or regional legislation, shall be completely preserved;
 - b) trees, shrubs, and lianas that are rare, threatened or endangered in a particular region (e.g. noble broadleaf trees, Siberian larch, and Siberian pine in the taiga zone of European Russia) shall be completely preserved;
 - c) residual trees of non-target species; large cavity trees; trees with large bird nests, seed trees; and large windthrow resistant dying trees and snags located at the distance from roads, landings etc. as well as such trees left within clumps and groups shall be preserved to the extent it is possible;
9. rare, threatened or endangered ecosystem (forest) types shall be preserved;
9. in evenaged dark (spruce and fir) coniferous, mixed coniferous–broadleaf and broadleaf forests, which develop in the absence of fires, the preference shall be given to selection cuts. (Note that broadleaf trees here mean noble broadleaf species like oak, ash, maple, elm, linden, and alike);
9. the use in such forest types (see point 3) of narrow clear-strip cuts, shelterwood (multistage) cuts, and clearcuts is only possible when they correspond to peculiarities of the natural dynamics of a particular forest type and are aimed to minimize their impact (e.g. the width of strips, including technological parts of the harvest area, shall be limited by a height of the dominant tree canopy or small-size clearcuts shall be used, thus providing preservation of groundcover and soils);
9. the use of clearcuts in other forest types shall mimic the natural dynamics of a particular forest type and provide retention of seed trees, ecologically valuable trees (see point 1) as well as critical habitats (key habitats) and, depending on a situation, of young growth and small-size trees; and
9. the use of fire with any purpose shall be excluded.

When planning forestry operations, all available materials on identified HCVF, wetlands of conservation importance, important bird areas, protective forests, and OZU as well as candidate areas for protected nature areas or ecological networks shall be considered.

During management planning all available materials containing proposals on identification of HCVF, wetlands, important bird areas, protective forests, special protection forest habitats, plans for establishment of protected areas and ecological networks shall be considered.

In addition, systematic efforts shall be undertaken to ensure identification and conservation of rare, threatened, and endangered species habitats on the basis of the Red Data Book of the Russian Federation or relevant regional red data books or lists of such species.

National and regional level HCV 1. The management regime in **HCV 1.1 (protected nature areas)** shall ensure management restrictions that are not less strict than those prescribed by the legal management regime of an existing or candidate protected area. When the management regime of a protected area in addition restricts other activities (visiting, hunting, fishing, collection of NTFPs and fires), the applicant shall establish control over them.

The management regimes in **HCV 1.2–1.4** shall be aimed at maintenance of characteristics of rare, threatened, and endangered species habitats. The respective regimes should be developed on the basis of knowledge of biology of a particular species of high conservation value considering identified sites of conservation importance. For example, selection cuts (and even clearcuts) by

themselves do not exert a threat to some wildlife species. However, the disturbance to animals caused by harvesting operations should be taken into account. In such cases, seasonal restriction for harvesting shall be applied. Some species may tolerate harvesting (or winter harvesting) but require deadwood for their existence. For conservation of plants it will be sufficient to restrict management activities in buffer zones around their protected habitats.

When is not possible to prove that a particular type of harvesting does not threaten to species conservation, the precautionary approach shall be used that means than a strict conservation regime shall be established in the area.

To ensure preservation of **national level HCV 2** intact forest landscapes (IFL) the following activities shall be implemented¹⁰:

1. The most valuable parts of IFL (strict conservation zones) shall be identified. Such areas shall be compact in shape and significant in size to serve as reference wilderness areas, in which forestry activities and fragmentation by roads are completely prohibited. The area of the strict conservation zone shall be as large as possible under local social conditions. The long-term conservation of such areas shall be reached through establishment of a protected nature area. As an intermediate solution, however until a final decision on protecting the area will be made, all management operations within the area can be suspended by means of a logging moratorium (voluntary commitment by the managers, including leaseholders) or of legal land reservation by the authorities in charge.

2. In the rest of IFL (outside of strict conservation zones) the best available forestry technologies and practices with regard to conservation of biodiversity and forest ecosystem shall be implemented. The introduction of the best available forestry technologies and practices can be gradual depending on existent legislation and possibilities of a particular enterprise. However, the environmentally responsible enterprise shall have an approved program for their introduction, which is being implemented. Such technologies and practices may include:

- the use of harvesting techniques that mimic the natural dynamics of the forest in each type of forest or condition;
- the priority use of selection cuts in forest, whose natural dynamics does not include stand-replacing disturbances;
- retention of key elements of the original stand (individual old trees and their groups, buffer zones along any watercourses and lakes, clumps of trees and groups of snags and young growth) to ensure preservation of diversity of forest environment and patchiness of habitats;
- key habitats (critical habitats) – the most valuable forest areas from the standpoint of biodiversity conservation – shall be identified and protected; and
- the use of technologies aimed at natural forest regeneration;
- the use of machinery and technologies that minimize the impact on soils and young growth and pollution of soil and streams; and
- inventories of species and ecosystems that are rare or threatened in a particular region shall be conducted and identified sites shall be protected.

In order to exclude further significant fragmentation, IFL shall be considered when planning road construction.

The similar approach applies to **regional level HCV 2**. Different variants of zoning can be used, ranging from complete protection of the area to its subdivision into areas with different values. However, they shall have the following in common:

- area and all dimensions of reference areas, in which all or the majority of management activities and fragmentation by roads and other communications are prohibited, shall be large; and
- further significant fragmentation of such areas (i.e. fragmentation by permanent roads and other communications) shall be prevented.

¹⁰ According to the *Declaration of Russian Non-governmental Conservation Organizations on Conservation Values of Intact Forest Landscapes* adopted at the meeting of Russian non-governmental conservation organizations on Western Siberian forests in Novosibirsk, December 22 2006 (http://wwf.ru/about/what_we_do/forests/hcvf_2/event_hcvf/novosib).

During harvesting the best available forestry technologies and practices with regard to conservation of biodiversity and forest ecosystem shall be used.

The management of **HCV 3** shall ensure the preservation of high conservation values (tree and overall species composition, spatial structures, and natural dynamics) of rare, threatened or endangered ecosystems. The management regime should be developed on the basis of knowledge of biology of high conservation value ecosystems considering their borders. In most cases preservation of high conservation values require prohibition of all types of harvesting.

When it is not possible to prove that a particular harvesting technique does not threaten to conservation of rare, threatened, and endangered ecosystems, the precautionary approach shall be used that means than a strict conservation regime or similar shall be established.

The regulation of secondary forest use (collection of NTFPs and use for recreation) depends on the ecosystem type. Thus, a rare ecosystem of the Russian Far East spruce forest with Asian devil's club (*Oplopanax elatus*) shall be protected by prohibiting or restricting collection of the latter species (a federal level red-listed species; the Red Data Book indicates that the species is threatened by collection for medicinal purposes and recommends to use it resources sustainably). In most rare ecosystems, visiting and collection of ornamental plants are permitted under condition that the use of fire is controlled.

It is advisable to include rare, threatened or endangered ecosystems in protected areas when necessary.

In general, the management regime in **HCV 4** shall correspond to legal management restrictions of respective protective forests and OZU prescribed by relevant regulations.

Sometimes there is a need to control thinning and other silvicultural operations performed by a forest management administration (lesnichestvo). Upon finding that commercial harvesting has occurred under the name of silvicultural operation, the relevant measures shall be immediately applied.

The management regime in **HCV 5** and **6** shall strongly depend on the needs of local communities. This requires wide scale consultations, whenever possible involving social technologies experts. The management regime in **HCV 5** often corresponds to legal management restrictions of respective protective forests and OZU, while that of **HCV 6** requires a stricter protection.

Other **categories of HCVPs** are understood as areas, whose high conservation value is undebatable, but which cannot be unambiguously referred to any existing HCVP category (or they may simultaneously belong to several categories). The management regime for such areas shall be developed on the basis of careful investigation of their high conservation values.

The process for developing a management regime for HCVP may include the following steps:

- to identify and map HCVP;
- to collect information and describe attributes of high conservation values present in the area (e.g. local rare species, ecosystem functions and services, special significance for local communities);
- to develop a management regime (strict conservation, management restrictions or control over other activities);
- to choose a management type; and
- to consider HCVP location and regime in the forest management plan.

Monitoring of HCVP

Monitoring of HCVP is conducted to assess on a regular basis to what extent the maintenance of high conservation values is achieved. The condition of HCVP can be affected by the impact of either management activities (both of the enterprise itself and other organizations), or natural factors, such forest fires, pest outbreaks etc. The results of monitoring may require revision of the set of protection and/or management measures and correction of the forest management plan.

In areas for which strict conservation measures are proposed, monitoring of HCVF is the easiest, since it implies mainly keeping a track of records of changes in HCVF attributed to some dramatic natural events (massive windfalls, catastrophic fires etc.), long-term trends (e.g. changes in composition and condition of flora and fauna) and management activities of third parties (including illegal ones). The choice of monitoring method depends on the character of information being collected from foresters, hunters, fishermen etc. and enterprise's resources and can be based on:

- monitoring of forest condition using remote sensing materials;
- data on changes in forest land annually collected by district level forest management administration;
- field survey materials (zoological, botanical, forest pathology etc.); and
- continuous stationary scientific research.

In areas where management activities are restricted, monitoring of HCVF, besides aforementioned methods, presumes a wider array of monitoring methods and their greater thoroughness. Thus, it is necessary to assess how the implemented measures ensure the maintenance of high conservation values, both in short-term and long-term perspectives. For example, it should be learnt, whether harvesting leads to stronger windfall or mass decline of trees, higher frequency of fires, noticeable changes in flora and fauna (e.g. looking at disappearance or appearance of certain indicator species) etc.

All information collected during monitoring of HCVF shall be used to assess the efficiency of conservation measures with regard to the overall objective – to ensure maintenance of attributes of high conservation values as well as to assess the implemented management system with respect to biodiversity conservation in general.

Monitoring activities can be carried out by the enterprise itself, various governmental bodies (Federal Forestry Agency or Federal Service for the Oversight of Natural Resources), research institutes, and non-governmental conservation organizations in cooperation with enterprise. The forest manager shall consider the results of monitoring in the implementation of management activities for the current year, by correcting the set and parameters of activities, and to revise the forest management plan when necessary. Monitoring materials can be also used when developing a program on protection of HCVF, key habitats etc. as well as in negotiations with NGOs and the forest management administration.

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Annex F. Indigenous Peoples

There is a number of definitions of indigenous peoples accepted in international and Russian practices applicable to this standard. Since 2000 in its interpretation of indigenous peoples FSC follows the Working definition adopted by the UN Working Group on Indigenous Peoples (UN, 1989): “The existing descendants of the peoples who inhabited the present territory of a country wholly or partially at the time when persons of a different culture or ethnic origin arrived there from other parts of the world, overcame them and, by conquest, settlement, or other means reduced them to a non-dominant or colonial situation; who today live more in conformity with their particular social, economic, and cultural customs and traditions than with the institutions of the country of which they now form a part, under State structure which incorporates mainly the national, social, and cultural characteristics of other segments of the population which are predominant” (FSC-AC, February 2000).

Since March 2002 FSC also included in its requirements the provisions of *ILO Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries*. This convention defines as indigenous peoples and applies to:

“(a) Tribal peoples in independent countries whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations;

(b) Peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present State boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural, and political institutions”. . . .

“2. Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply”.

This ILO convention is not ratified by Russia.

The Russian legislation contains only a notion of small-numbered indigenous peoples of Russia. The federal (Art. 1) *Guaranties of the Rights of Small-numbered Indigenous Peoples of Russian Federation Act* (1999) defines them in the following way: “Small-numbered indigenous peoples of Russian Federation (thereafter named small-numbered nations) are nations, which inhabit areas traditionally occupied by their ancestors, maintain traditional lifestyles, management systems and use of natural resource, whose numbers does not exceed 50 thousand peoples and who identify themselves as independent ethnic communities.”

The General List of Indigenous Small-numbered Peoples of Russia was approved by the Government of the Russian Federation No. 255 on March 24 2000. In accordance to the aforementioned parameters it contains 45 nations (Table F1). Besides that, some Russian regions have their own lists of indigenous peoples.

Therefore, the Russian legislation on indigenous peoples does not apply to more numbered indigenous peoples, such as Buryats, Karels, Komi, Yakuts, Tuvans, and other title nations of republics and autonomous okrugs of the Russian Federation. At the same time, many communities of these nations have traditional lifestyles and uses of natural resources. Furthermore, most of legal rights of indigenous peoples with respect to traditional use of natural resources apply only to indigenous small-numbered peoples of North, Siberia, and the Russian Far East. Some small-numbered ethnic groups, which identify themselves as indigenous peoples, e.g. Komi-Izhems and Pomors, are also not listed in the aforementioned lists.

In this standard, indigenous peoples are understood as groups of people, which in the course of many generations, identify themselves as an independent ethno-cultural group (nation, ethnos, ethnic group or ethno-cultural group); are linked to a particular geographical region; and preserve elements of their lifestyle based on traditional uses of natural resources (integrated management of natural resources, which in different combinations, includes animal husbandry, agriculture, hunting

and trapping wildlife and the use of non-timber forest products, which are still of cultural importance for these communities).

Table F1. General List of Indigenous Small-numbered Peoples of Russia*

Small-numbered peoples of Russia	Administrative region of the Russian Federation, in which live small-numbered peoples of Russia**
Abazins	Republic of Karachay–Cherkessia
Aleuts***	districts of Kamchatka Oblast, Koryak Autonomous Okrug
Alyutors***	Koryak Autonomous Okrug
Bisermän	Republic of Udmurtia
Chelkans***	Altay Republic
Chukchi***	Chukotka Autonomous Okrug, Koryak Autonomous Okrug
Chulyms***	Tomsk Oblast, Krasnoyarsk Kray
Chuvans***	Chukotka Autonomous Okrug, Magadan Oblast
Dolgans***	Taymyr (Dolgano–Nenets) Autonomous Okrug, districts of Krasnoyarsk Kray, Republic of Sakha (Yakutia)
Enets***	Taymyr (Dolgano–Nenets) Autonomous Okrug
Eskimo***	Chukotka Autonomous Okrug, Koryak Autonomous Okrug
Evenks***	Republic of Sakha (Yakutia), Evenki Autonomous Okrug, districts of Krasnoyarsk Kray, Khabarovsk Kray, Amur Oblast, Sakhalin Oblast, Buryat Republic, Irkutsk Oblast, Chita Oblast, Tomsk Oblast, Tyumen Oblast
Evens***	Republic of Sakha (Yakutia), Khabarovsk Kray, Magadan Oblast, Chukotka Autonomous Okrug, Koryak Autonomous Okrug, districts of Kamchatka Oblast
Itelmens***	Koryak Autonomous Okrug, districts of Kamchatka Oblast, Magadan Oblast
Izhorians	Leningrad Oblast
Kamchadals***	districts of Kamchatka Oblast, Koryak Autonomous Okrug
Kereks***	Chukotka Autonomous Okrug
Kets***	Krasnoyarsk Kray
Khants***	Khanty–Mansi Autonomous Okrug, Yamalo–Nenets Autonomous Okrug, districts of Tyumen Oblast, Tomsk Oblast, Komi Republic
Koryaks***	Koryak Autonomous Okrug, districts of Kamchatka Oblast, Chukotka Autonomous Okrug, Magadan Oblast
Kumandins***	Altay Kray, Altay Republic, Kemerovo Oblast
Mansi***	Khanty–Mansi Autonomous Okrug, districts of Tyumen Oblast, Sverdlovsk Oblast, Komi Republic
Nağaybäks	Chelyabinsk Oblast
Nanais***	Khabarovsk Kray, Primorskiy Kray, Sakhalin Oblast
Negidals***	Khabarovsk Kray
Nenets***	Yamalo–Nenets Autonomous Okrug, Nenets Autonomous Okrug, districts of Arkhangelsk Oblast, Taymyr (Dolgano–Nenets) Autonomous Okrug, Khanty–Mansi Autonomous Okrug, Komi Republic
Nganasans***	Taymyr (Dolgano–Nenets) Autonomous Okrug, districts of Krasnoyarsk Kray
Nivkhs***	Khabarovsk Kray, Sakhalin Oblast
Orochs***	Khabarovsk Kray
Oroks (Ulta)***	Sakhalin Oblast
Sami***	Murmansk Oblast
Selkups***	Yamalo–Nenets Autonomous Okrug, districts of Tyumen Oblast, Tomsk Oblast, Krasnoyarsk Kray
Shapsugs	Krasnodar Kray
Shorians***	Kemerovo Oblast, Republic of Khakassia, Altay Republic

Small-numbered peoples of Russia	Administrative region of the Russian Federation, in which live small-numbered peoples of Russia**
Soyots***	Buryat Republic
Tazs***	Primorskiy Kray
Telengits***	Altay Republic
Teleuts***	Kemerovo Oblast
Tofalars***	Irkutsk Oblast
Tubalars***	Altay Republic
Tuvans-Todzhins***	Tuva Republic
Udege***	Primorskiy Kray, Khabarovsk Kray
Ulchs***	Khabarovsk Kray
Veps***	Republic of Karelia, Leningrad Oblast
Yukaghirs***	Republic of Sakha (Yakutia), Magadan Oblast

* Indigenous small-numbered peoples of the Republic of Dagestan are listed in the Order by the Government of the Russian Federation No. 236 on March 28 2001; this list was approved by the State Council of the Republic of Dagestan No. 191 on October 18 2000 *On Peculiarities of the Implementation of the Federal Law On Guaranties of the Rights of Small-numbered Indigenous Peoples of Russian Federation in the Republic of Dagestan*. This list is part of the *General List of Indigenous Small-numbered Peoples of Russia*.

** Names of the administrative regions of the Russian Federation are given in the order of decreasing number of a particular nation living at in the region.

*** Included in the *List of Indigenous Small-numbered Peoples of North, Siberia, and the Far East of the Russian Federation* (decision by the Government of the Russian Federation No. 536-r on April 17 2006).

Therefore, this definition also applies to certain ethnic groups, such as century-old traditional communities of Russian descent (Pomors, Old-believers (staroobryadtsy), and Cossacks) and other groups with a specific culture and self-identification. Local communities of Buryats, Karels, Komi, Yakuts, Tuvans, and other title nations of republics and autonomous okrugs of the Russian Federation, who have traditional lifestyles and uses of natural resources, shall be also considered as indigenous peoples. The complexity of the ethnic composition and socio-cultural diversity of local communities occurring in Russia does not permit giving complete descriptions of all ethno-cultural groups. Therefore, the Principle 3 shall be applied to any group, which identifies itself as an indigenous community.

Rights and interest of indigenous communities with respect to protection and use of natural resources in sites of special significance for indigenous peoples (**HCV 5** and **HCV 6**), except **Criterion 3.3**, are also covered by **indicators 9.1.5, 9.3.8, and 9.3.9**.

Annex G. Glossary

Administrative and public control: The main tool of the management and trade union committee (or other representative workers structure) to ensure control of health and safety at working places, production units, workshops as well as observation by all services, managers and staff of the requirements of the work legislation, safety and health standards, regulations, instructions and other normative and technical documentation on work health and safety in the system of personal health and safety and industrial security. The administrative and public control (APC) at the enterprise is regulated by an administrative order or special enterprise's standard.

The APC is aimed to involve workers and engineers in activities to improve work conditions at the enterprise, routines to avoid accidents at work places, prophylactics of professional diseases and working culture.

Generally APC is established at three levels (stages):

- first level: a production unit for shift or brigade, department, laboratory, repair division etc.;
- second level: workshop, shift, department etc.; and
- third level: the organization as a whole.

APC is managed by the enterprise manager and the head of the trade union committee or other representative structure authorized by workers. The records of APC are kept in a special register of the relevant level. In the absence of APC, health and safety control functions can be implemented by a health and safety committee (commission). Such a committee shall have equal representation of employer and trade union (or other structure authorized by the staff).

Afforestation: Creation and planting of human-made forests in areas which have not been forests before.

Annual allowable cut (AAC): Annual quota of final felling (commercial harvesting), being calculated for district level forest management administration unit. Since 2007 shall also account for wood harvested during **silvicultural operations** (thinning), salvage and **other categories of cuts**. At areas leased for wood harvesting instead of AAC the **annual timber removals from final felling** is used.

Annual timber removals: Annual allowable quota of commercial timber harvesting for a particular timber lease (concession). It is obtained by re-calculating the **allowable annual cut** assigned for the district level forest management administration unit considering information on forest blocks (kvartals) given into lease. Since 2007 shall also include timber removals during **silvicultural operations** (thinning) and salvage logging.

Authorized representative of indigenous peoples (local community): Public organizations of **indigenous peoples** or their entities (unions, associations) or persons, which are authorized by **indigenous peoples (local community)** to represent their interests in relations with regional and local authorities and industries regarding socio-economic development within **traditional nature use areas**, protection of original land environment, traditional lifestyles and traditional economic activities of **indigenous peoples**. For a **local community** this could be the head of the local government (samoupravlenie) or persons authorized by a formal community wide gathering of residents (skhod).

Biological control agents: Living organisms or products derived from their activity used to prevent or reduce the damage to the forest by **pests**. BCA make up the basis of **biological control methods of pest management** and are based on the use of entomophagous microorganisms (as bacterial preparations), entomophagous insects, insect feeding birds, and mammals.

Biological control methods of pest management: The use of living organisms or products derived from their activity (**biological control agents**) to prevent or reduce the damage to the forest by **pests**. The use of such methods does not lead to environment pollution and does not adversely affect on humans, plants and forest ecosystems and have continuous after-effect. In some cases, however, may lead to adverse implications, e.g. when using exotic entomophagous insects.

Certificate: A document that certifies the conformity of **forest management** practiced by a forest management unit or forest enterprise to the *FSC Principles and Criteria* and gives the right to label products.

Certification: The procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements (e.g. of the *FSC Principles and Criteria*).

Chemical control methods of pest management: The use of **pesticides** to prevent or reduce the damage to the forest and timber by **pests, forest diseases**, weeds, and destructors of timber and other raw materials. The wrong and unjustified use of such methods could exert adverse impact on useful flora and fauna (including vertebrate species), ecosystem and humans.

Clearcut: Harvesting in a designated area with retention of individual trees and shrubs (groups of trees and shrubs) to ensure **forest regeneration**.

Confidential information: Information that cannot be disclosed or made public due to the fact that it:

- contains sensitive information that if made available could harm or even pose a threat to the existence of a site of high conservation value or to interests of **indigenous or local communities**;
- breaches the existing confidentiality agreements;
- contains information that is subject to existing copyright law and other forms of legal defense, including the intellectual property rights, defense of national security or public order, privacy laws, and laws of protection of confidential information mechanisms associated with these types of legislation; and
- contains information that would affect the applicant's competitiveness (e.g. detailed description of costs, revenues, etc.).

Conversion of forest lands: Conversion of **forest lands** into other land categories with different management objectives in accordance to the *Land Code* and the *Federal Land Conversion Act* (e.g. in agricultural lands, urban lands, lands of protected nature areas etc.). In some cases, change of a land category may lead to irreversible loss of forest cover.

Critical habitat: See **Key habitat**.

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 within a geographical or sociological unit. However, in many cases, while being an effective rule, customary rights are not documented. Customary rights refer not to individual person but a group of people (community), tribe or nation.

Harvest area: A forest area assigned for wood harvesting, cutblock.

HCVF: See **High conservation value forests**.

High Conservation Value Forests (HCVF): Forests that possess one or more of the following attributes:

- a) Forest areas containing globally, regionally or nationally significant:
 - Concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or
 - Large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance (see also **intact forest landscapes**);
- b) Forest areas that are in or contain rare, threatened or endangered ecosystems;
- c) Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control);
- d) Forest areas fundamental to meeting basic needs of **local communities** (e.g. subsistence, health) and/or critical to **local communities'** traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such **local communities**).

Degraded lands: Lands which lost their economic values or which have an adverse impact on the environment caused by disturbed soil, hydrological regime, and technogenic topography resulted from human activity and other qualitative changes of their state.

Ecological expertise (ekologicheskaya ekspertiza, EE): An administrative procedure to assess that planned management and other activities conform with environmental requirements and to determine the permissibility of realization of the project under consideration in order to prevent the development of potentially adverse effects of these activities and related social, economic, and other consequences.

Economically accessible forests: Forests included in the exploitable **forest lands**, with exception of **economically inaccessible forests**.

Economically inaccessible forests: Forests in the exploitable **forest land** that have low growing stock (60 to 90 cubic meters per hectare depending on a region) or have been cut down more than 10 years ago, in which potential **harvest areas** are dispersed and have individual size of less than 25 hectares.

Endangered species: Any species which is in danger of extinction throughout all or a significant portion of its range or species, which are legally protected in the Russian Federation as a whole or particular administrative regions.

Endemic species: Species of plants, animals, and fungi, which occur only in this area (region or country) and nowhere globally.

Exotic (introduced) species: An introduced species not native to the area in question (especially species from other continents). In this standard this does not apply to **reintroduced species**, i.e. species that historically occurred at the area (e.g. noble broadleaf species that have disappeared from some regions of European Russia) and for which special restoration measures are used.

Forest areas within lands of other categories: The forests, which occur within lands of other than **forest land** categories (e.g. agricultural lands, land of settlements). Such forests can be owned by administrative regions of the Russian Federation, local authorities or private organizations.

Forest diseases: Pathological processes that are triggered by or develop as a result of activities of pathogens causing infectious diseases (fungi, bacteria, viruses, nematodes, higher flowering plants etc.) and unfavorable environmental factors of natural (droughts, flooding, frost etc.) and anthropogenic (pollution, recreation etc.) character as well as of noninfectious diseases, which cause harm to target functions of forests and forest products.

Forest inventory: Annual operative collection and processing of data on the **forest land** of a forest enterprise, volume and quality of executed forest operations, and areas where forestry activity can be performed in a next year. In addition, as a rule, once a decade, forest inventory prepare a **forest management plan** which is based on analyze of the results of economic activities and changes in the **forest land**.

Forest lands (State Forest Fund): The totality of forest and non-forest lands constituting the respective land category. The forest lands are federally owned, although responsibilities for their management and use can be passed to administrative regions of the Russian Federation.

Forest management: Activities designed for maintenance and use of various forest functions which are carried on in accordance with the current laws and other regulations.

Forest management plan: Document approved by the enterprise that determines the strategy for use, conservation, protection and **regeneration of forest** and other resources and a detailed plan of management activities for coming years. The forest management plan is regularly revised. The document contains characteristics of forest resource, calculation and rationale for **annual timber removals**, locations of **harvest areas** by years, description of harvesting techniques, **silvicultural operations** and road construction activities etc. The FMP is developed on the basis **forest inventory** materials with consideration of available materials. Two types of FMP are recognized: **lesokhozyaystvenny reglament** (for a state forest management unit, lesnichestvo) and **proekt osvoeniya lesov** (for leased areas). Other enterprise's guiding documents (strategies, policies and operating guidelines) also can be considered as part of FMP.

Forest regeneration (reforestation): The process and activities following **clearcut** aimed to regenerate forest vegetation dominated by major tree species within the specified timeline. Natural forest regeneration is reforestation, which takes place at a harvested area owing to the presence of natural sources of seed (seed sprouting and vegetating stump and root sprouting) without active involvement of humans, although does not preclude their assistance at the beginning (soil scarification, site fencing). The assistance to natural regeneration may include the use of residual trees and shrubs as well as their groups, considering their condition and suitability. Artificial forest regeneration is reforestation, which is mainly based on artificial sources of reforestation (planting of seeds or trees); the course of its further development is controlled by implementing certain activities. The integrated forest regeneration is reforestation, which combines methods of natural and artificial regeneration in situations when natural sources of seeds are lacking.

Forest seed base: A high-productive area of natural high-grade forest or **plantations** made for regular collection of seeds of important tree species with valuable hereditary and sowing qualities for a long time.

Indigenous community (obshchina): A form of self-organization (community) of **indigenous peoples** united by kinship (family, clan) and/or neighborhood relations, which are established to protect their original land environment, protect and develop traditional lifestyles, economic activities, crafts, and culture. In this standard this term covers both indigenous and **local communities**.

Indigenous peoples: Groups of people, which in the course of many generations, identify themselves as an independent ethno-cultural group (nation, ethnos, ethnic group or ethno-cultural group); linked to a particular geographical region; preserve elements of their lifestyle based on traditional uses of natural resources (integrated management of natural resources, which in different combinations, includes animal husbandry, agriculture, hunting and trapping wildlife, and the use of non-timber forest products, which are still of cultural importance for these communities).

Intact forest landscapes: Large natural landscapes within the forest zone minimally disturbed by human activities. An intact forest landscape is a landscape greater than 50 thousand hectares in the forest zone that is whole and natural, undivided by infrastructure and almost entirely unaffected by intensive human activities (clearcutting, exploitation of mineral resources, forest conversion to agriculture and development, road construction, and stand-replacing fires next to anthropogenic infrastructure) during the last 60 years.

Key habitat or biotope (critical habitat): Habitats with high number (large populations) of **species** that are **rare, threatened, endangered**, care-demanding, and vulnerable to disturbance and habitats that are critical for lifecycles of vertebrate species (e.g. nesting grounds, borrows, refugia, sites for concentration or permanent migration routes and foraging and feeding grounds. In most cases, in practice habitats with the high probability of non-accidental occurrence of **rare, threatened, endangered**, vulnerable, and care-demanding species are identified. Such places are significantly simpler to identify (even for non-specialists) using indirect characteristics such as indicator species (habitats specialists) or biotope characteristics.

Key stand elements: Individual trees, their clumps and groups that are the key structures and substratum for **rare, threatened, endangered**, care-demanding, and vulnerable to disturbance habitat specialists. Retention of such structures during **clearcut** (e.g. seed trees of **target species**; some old **non-target** broadleaf trees; trees with large bird nests, large cavity trees; veteran trees whose age noticeably exceeds the average age of the main canopy; tree species rare in this area; and large windthrow resistant dying trees and snags) together with preservation of **key habitats** helps to biodiversity conservation in **harvest areas**. At areas with a high groundwater table and in the neighborhood of wetlands it is recommended to leave standing windthrow resistant trees in order to partly preserve the stand transpiration capacity. The residual trees may make up to 10–20% of the pre-harvest growing stock.

Keystone species (edifiers): Species, which cause the most significant transformations of the environment. By creating large and lasting population mosaics, such species make habitat conditions suitable for sustainable existence of subordinated species. If the population of a keystone species is removed from the ecosystem, the populations of other species and processes of the ecosystem change dramatically. The good condition of the keystone species is a reliable indicator of the presence of the associated species. Examples of the key species are European bison, which earlier shaped the structure and functioning of temperate hardwood forests, beavers that exert a serious effect on the water regime of the area and large trees of Siberian or Korean pines (cedars), and oak, owing to which a complex of associated species can exist in cedar and temperate hardwood forests, respectively.

Legal rights: A system of norms, rules, and behavior based on the existing laws and regulations.

Lesokhozyaystvennyy reglament: A **forest management plan** for a district level forest management administration unit (forestry (lesnichestvo), park forest (lesopark) for a revision period (not more than 10 years).

Local communities (local people): People inhabiting a particular area and who reside permanently or at least seasonally in settlements in this area from year to year.

Long term (said of planning): The length of time of several revision periods totaling more than a half of a cutting cycle for a commercial section or period of long-term lease (at the duration of lease not less than 49 years).

Management section: A structural and management unit of the **forest lands** which is a set of forest stands and non-forest lands of a forest enterprise with one dominant species and a common management purpose (pine, spruce, oak, beech etc.).

Management unit (with respect to forest resource: A set of **management sections** that have similar management objectives (coniferous, noble broadleaf, other broadleaf).

Mimicking (imitation) of natural dynamics of the forest (during harvesting): The system of adaptive forest management according to which the choice of harvesting techniques shall strive to mimic the natural dynamics of a particular forest type and take into account composition and structure. For example, when harvesting in evenaged dark (spruce and fir) coniferous, temperate coniferous–broadleaf, and temperate hardwood forests, which develop in the absence of fires (stand-replacing disturbance), the preference shall be given to **selection cuts**. In variants of dark coniferous stands with expressed tree generations, some **shelterwood (multistage) cuts**, and small-size **clearcuts** can be used. (Note that broadleaf trees here mean noble broadleaf species like oak, ash, maple, elm, and linden.) Within the framework of this approach it is not recommended to imitate natural catastrophic events, such as catastrophic stand-replacing fires. Therefore, the rationale for the use of **clearcut** shall be provided and the harvesting shall include measure on biodiversity conservation. Thus, in coniferous and coniferous–broadleaf stands with fire dynamics, seed trees in number sufficient to provide natural regeneration, pole-size trees, **key stand elements**, and **key habitats** (e.g. small bogs, forest strips along the streams etc.) shall be retained.

Narrow clear-strip cut: **Clearcut** made in strips less than 100 m wide.

Non-exploitable areas (NEP): Designated areas within the designed cutblocks, which are not subject to harvesting of timber because of silvicultural, economic or environmental considerations. Such areas may include non-forest patches (bogs, clearcuts, openings in the forest etc.); seed clumps and strips; patches of young, middle-aged, and undermature stands dispersed among mature stands; as well as areas, which shall be protected in order to preserve natural objects of high conservation value, biodiversity (**key habitats, key stand elements**), and forest environment. NEPs can be also designated during timber harvesting if such areas had been overlooked earlier.

Non-target species: Species which have no commercial value under particular management objectives.

Other categories of cuts: **Clearcuts** made irrespectively of stand age in order to clear **forest lands** for various management purposes.

Outstanding disputes (of substantial magnitude involving a significant number of interests): An open conflict or dispute, which is characterized by confrontational points of view that involves:

- local rights holders, local forest workers, or local residents;
- the **legal or customary (or traditional) rights of local communities and indigenous peoples**;
- a range of issues and/or interests;
- potential impacts to the disputant(s) that are irreversible or cannot be mitigated; and
- are related to meeting the FSC Standards.

OVOS (Environmental impact assessment): A procedure to reveal, analyze, and take into account direct, indirect, and other negative impacts on the environment of planned management and other activities in order to make decision whether they are permissible or not.

OZU: See **Special protection forest habitats**.

Pesticides: Synthetic chemicals that are used to control/kill animals and forest diseases which harm the trees and shrubs, unwilling plants (weeds), dendrophagous animals. They can be chemical or biological in nature. Pesticides are the main tool of **chemical control methods of pest management**. Pesticides include insecticides, which kill insects, acaricides (for ticks), fungicides (for fungal diseases), bactericides (for bacterial diseases), herbicides (for plants) etc.

Pests: Animals (insects, ticks, ungulates, rodents, and others), whose activity may lead to reduced increments and fruit-bearing of plants, to disturbance of plant regeneration and growth, to decline and death of trees and shrubs, and to damage of forest products (mainly timber). Massive pest outbreaks may exert a serious adverse impact on forestry and **forest management**. Such organisms are often considered harmful, which is not totally correct, thus insects (besides **exotic** ones) constitute a typical component of natural forest ecosystems and provide maintenance of their natural development cycles.

Plantation: A comparatively large area of human-made stands designed for accelerated growth of trees and shrubs to produce timber products with specific technical characteristics. The priorities in plantation forestry are given to economic and technical characteristics. Thus, the rest stands of artificial origin are not plantations because their main purpose is to restore characteristics of forest vegetation of the relevant landscape. The priorities for establishing artificial stands are for ecological, silvicultural and recreational purposes. An area of stands of natural origin treated with intensive improvement cuttings or other operations aimed at changing their structure to yield merchantable wood of relevant assortments is classified as plantations.

Proekt osvoeniya lesov: A **forest management plan** for a lease area for a period of the lease, including a detailed plan of management activities for coming years (usually 10 years). POL is developed on the basis of **lesokhozyaystvenny reglament**.

Protected sites: In this standard forest areas that have legal forest management restrictions in accordance to their high conservation values or such areas that are in process of acquiring a relevant status or such areas for which there is a voluntary documented long-term commitment by the enterprise to observe the relevant management restrictions. Such areas may include existing and candidate protected areas, important bird areas of Russia, existing and candidate Ramsar wetlands, **protective forests, OZU**, legal plans of ecological network as well as any areas voluntary set aside for conservation by the enterprise (e.g. **HCVF** or **representative samples of existing ecosystems** lacking a legal status).

Protective forests: legal categories of forests, whose ecological and/or social importance is higher than economical. The main purpose of management of such forests is to ensure conservation and maintenance of biodiversity and to perform ecosystem functions and services (protection of water and forest resources, maintaining human health and hygienic functions etc.). Therefore, management activities in such forest are restricted depending on their conservation value and functions. Forests receive a legal protective status during state forest inventories.

Rare species: Species of plants, animals, and fungi with small numbers of individuals in a particular administrative region of the Russian Federation, region, country or globally due to different reasons (e.g. natural peculiarities or historical reasons).

Rare, threatened, and endangered species habitats: Habitats where occur or potentially may occur **rare, threatened, and endangered species of plants, animals, and fungi**. In most cases in practice **key habitats (critical habitats)** of such species are identified and protected.

Rare, threatened or endangered ecosystems: Ecosystems that are rare (i.e. occupies insignificant fraction of a particular landscape, region, natural zone or globally) due to various reasons (e.g. uniqueness of natural development or human agency). Therefore, rare ecosystems are generally vulnerable (threatened or endangered), i.e. can be totally lost as a result of a wide array destructive factors and even insignificant disturbance. There are no commonly accepted criteria to referring ecosystems to rare, threatened or endangered ecosystems.

Reintroduced species: See **Exotic species**.

Relic species: All plants, fungi, animals, which have preserved in an area since ancient times, when climate and environmental conditions were different in comparison to present.

Representative samples of existing ecosystems: A network of **protected sites**, which are functionally interconnected and provide conservation of flora and fauna, landscapes, ecosystems, and habitats in applicant's the area. In practice this means that such a network shall:

- include all types of ecosystems and landscapes occurring in the area (i.e. to be representative);
- provide preservation of regionally and locally **rare, threatened or endangered** types of **ecosystems** and landscapes;
- ensure settling and migration of species; and
- serve a base for scientific research of natural processes in forests.

Functions of representative samples of existing ecosystems may perform existing protected areas and candidate areas, **protective forests**, relatively large **OZU**, including candidate areas for ecological networks, and voluntarily set aside forest areas.

Rotation period: The period of time between two consecutive **clearcuts**. If reforestation in a **harvest area** is carried out in the year following the **clearcut**, the rotation period, and the age of **clearcut** coincide. If reforestation is carried out some years later, the rotation period exceeds the age of **clearcut** for respective years. If viable undergrowth remains in a harvested area, the rotation period is shorter than the age of **clearcut** for the age of remained undergrowth.

Secondary forest uses: Includes hay cutting, animal grazing, keeping beehives, collection of tree sap, wild fruits, berries, nut, and mushrooms and other food, medicinal, and technical raw materials, moss, forest litter, reed etc.

Selection cut: A timber harvesting method at which part of trees of certain age, size, quality and/or condition is periodically felled down.

Shelterwood (multistage) cuts: Variant of harvesting of a mature stand, which involves a series of cuts over several decades (during one or two age classes), thus encouraging immediate or subsequent forest regeneration by leaving residual old, second-layer, and young trees. Some stages of shelterwood cuts can look as **clearcuts (narrow-strip cuts)**, while others as **selection cuts** (single tree selection, group (patch) selection, as well as long-rotation multistage cuts).

Short term (said of planning): The length of time less than one revision period (10 years).

Silvicultural operations: Technical and organizational measures designed for planting, reforestation, protection of exploitable and **protective forests**, increasing productivity and protective attributes.

Special protection forest habitats (OZU): Forest sites that perform significant protective functions or have special management functions with management restrictions. OZU are identified in **protective**, exploitable, and reserved **forests**. **Clearcuts** in OZU are usually prohibited.

Stakeholder: An individual or organization whose economic, social, spiritual or conservation-oriented interests can be positively or negatively affected as a result of **forest management**. The stakeholder may also influence the preparation for **certification** and its results.

Target species: Tree species intended for commercial harvesting.

Threatened species: Species whose numbers are permanently declining so that it is likely to become **endangered species** in the foreseeable future or species which are under protection within the Russian Federation or its particular administrative regions.

Traditional nature use areas: According to the Federal *Traditional Nature Use Areas of Small-numbered Indigenous Nations of the North, Siberia, and the Far East of the Russian Federation Act* as of May 2001 No. 49-FZ (D), special traditional nature use areas can be designated. These are protected areas established for maintaining traditional land uses and traditional lifestyles of small-numbered indigenous nations of the North, Siberia, and the Russian Far East. Such areas can be legally established by federal, regional, and local authorities. TNUA can be divided into the following zones:

- settlements, including those of temporal use and with changeable population, permanent dwellings, villages, stops of reindeer herders, hunters, and fishermen;
- parcels of land and waters used for traditional nature use and traditional lifestyles, including reindeer pastures, hunting and other grounds, sea areas used for fishing, see hunting, and collection of wild growing plants;
- historic and cultural heritage sites, including cult objects, places of ancient settling or burial grounds of ancestors, and other sites of cultural, historic, and religious significance; and
- other parts of TNUA permitted by the legislation of the Russian Federation and its administrative regions.

Traditional rights: A variant of **customary rights**. Originally traditional rights and traditional legal systems are characteristics of “non-state” societies. However, they could be still in effect nowadays. The custom can become a norm after it has been recognized as such by a known ethnic group, tribe etc.

Traditional use of natural resources: A specific integrated system for management of natural resources, which in different combinations, includes animal husbandry, agriculture, hunting and trapping wildlife and the use of non-timber forest products, which are still of cultural importance for **indigenous communities**.

Umbrella species: Species highly demanding to their habitats (large area, special conditions for migration, specific food resources etc.), which require a large area containing many types of habitats to sustain a viable population. Therefore, requirements of an umbrella species overlap with the requirements of many other species. By securing a large enough tract of land to sustain a viable population of these species, many others will come under the same protection. The examples of umbrella species are large predators (e.g. wolf, brown bear) and hoofed animals with large home ranges (e.g. forest reindeer).

Water protective zones: Protective riparian zones along the rivers, lakes, reservoirs, and other water bodies that have a special regime of management and management restrictions to prevent pollution, littering, silting,, and exhaustion of water bodies as well as to protect habitats of plants and animals. It is established in accordance with the Water Code of the Russian Federation.

Wide clear-strip cut: **Clearcut** made in strips more than 100 m wide; it is considered large if an actual cutting area is greater than 10 ha.

Annex H. Certification Terms

Definitions of the terms below are taken from the *FSC Glossary of Terms (2000)*. They are cited here to explain better terms used in the FSC Standards.

Criterion: A means of judging whether or not a Principle (of Forest Management) has been fulfilled.

Forest Stewardship Standard: The normative document which specifies the requirements with which a forest management enterprise must conform in order to obtain FSC certification. Such a standard must include the exact language of the *FSC Principles and Criteria for Forest Stewardship*, together with the additional indicators necessary to permit implementation at the level of the forest management unit.

FSC Principles and Criteria: The 10 Principles and 56 associated Criteria specified in the document *FSC Principles and Criteria of Forest Stewardship (2002)*.

Indicator: A quantitative or qualitative variable which can be measured or described, and which provides a means of judging whether a forest 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 forest management unit and are the primary basis of forest evaluation.

Means of verification: A potential source of information or evidence that allows an auditor to evaluate compliance with an indicator

Non-compliance with a Forest Stewardship Standard: Failure to meet the threshold requirement(s) of an indicator of a Forest Stewardship Standard. Such non-compliance may be considered “minor” or “major”:

Minor non-compliance with a Forest Stewardship Standard: A non-compliance may be considered minor if:

- it is a temporary lapse, or
- it is unusual/ non-systematic, or
- the impacts of the non-compliance are limited in their temporal and spatial scale, and
- prompt corrective action has been taken to ensure that it will not be repeated, and
- it does not result in a fundamental failure to achieve the objective of the relevant FSC Criterion.

Major non-compliance with a Forest Stewardship Standard: A non-compliance shall be considered major if, either alone or in combination with further non-compliances of other indicators, it results in, or is likely to result in a fundamental failure to achieve the objective of the relevant FSC Criterion in the Forest Management Unit(s) within the scope of the evaluation. Such fundamental failure shall be indicated by non-compliances which:

- continue over a long period of time, or,
- are repeated or systematic, or
- affect a wide area, or
- are not corrected or adequately responded to by the forest managers once they have been identified.

Principle: An essential rule or element; in FSC's case, of forest stewardship.