

ФЕДЕРАЛЬНОЕ АГЕНТСТВО ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ
И МЕТРОЛОГИИ (РОССТАНДАРТ)

ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ УЧРЕЖДЕНИЕ
«РОССИЙСКИЙ ИНСТИТУТ СТАНДАРТИЗАЦИИ»

National system of forest certification. Certification requirements for forest management system

*Национальная система лесной сертификации. Сертификационные требования к системе
лесоуправления*

Обозначение стандарта

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ORGANIZATIONAL STANDARD

STO NSFC.48861355-003-2023

APPROVED

General Manager

FGBU “Institute of Standardization”

_____ D.E. Mironov

July 19, 2024

[Signature, Stamp]

AMENDMENT No 1

**National System of Forest Certification.
Certification requirements for Forest Management
System**

AGREED

By NSFC Coordination Council

Chairman

_____ A.S. Peshkov

July 19, 2024

[Signature, Stamp]

**Moscow
2024**

Organizational Standard STO NSFC.46363355-003-2023 “National System of Forest Certification. Certification Requirements for Forest Management System” shall be amended as follows:

to be supplemented with Section 8 as follows:

“Section 8 – Requirements for the forest management system of an association group

8.1 General

8.1.1 Several organizations may jointly undergo the voluntary conformity assurance procedure under this standard if they are members of an association group pursuant to the terms and procedures hereof.

8.1.2 An association group shall consist of member organizations and shall have a manager who manages the association group. The number of members in the association group shall not exceed ten.

8.1.3 Member organizations of an association group can be those organizations, whose leased (managed) forest sites are included in the scope of certification, as well as contactors carrying out activities at these sites.

8.1.4 An association group may be managed by an organization that is a member of the association group, an external organization or an individual entrepreneur engaged by group members to manage the association group.

8.1.5 Association group members shall fulfil all applicable requirements of this standard in accordance with the scope of their forest management system.

8.2 Legal and contractual issues

8.2.1 The procedure for establishment and operation of an association group, the procedure for affiliation and expulsion of association group members, the procedure for determining their manager, the requirements for the members and manager, their rights, duties and responsibilities are given in this section and shall be described in the following mandatory documents of the association group.

- a) an Association group agreement signed between its participants,
- b) an agreement signed between the association group participants and the manager,
- c) a management procedure of the association group.

INSTRUCTION – With the consent of the association group participants, agreements between the association group participants and their manager may fulfil the function of the Association group agreement. In this case the Association group agreement shall not be documented.

8.2.2 The date of establishment of an association group is the date on which its members sign an Association group agreement. If agreements concluded between the members of the association group and the head of the association group fulfil the function of the Association group agreement, the date of establishment of the association group shall be the earliest date on which such agreements were signed.

8.2.3 The Association group agreement shall include at least the following provisions;

- a) Full name, location address and name of the head of each association participant.
- b) Information about leased (managed) sites of each participant (if applicable), specification of functions of each contractor participant in the sphere of application of the forest management system of the association group (if applicable).
- c) Obligation of each participant to ensure that its forest management system complies with the applicable requirements of this standard.

- d) Obligation of each participant not to take actions that violate interests of the association group and its participants.
- e) Obligation of each participant to fulfil the requirements of the management procedure of the association group.
- f) Obligation of each participant not to disclose confidential information about association group members.

8.2.4 The agreement between association group participants and the association group manager shall include, at least, the following;

- a) Full name, location address and full name of the head of the association participant.
- b) Full name, location address and full name of the manager of the association group.
- c) Participant's consent for the association group manager to perform management functions of the association group in accordance with the association group management procedure.
- d) Obligation of the association group manager to act for the benefit of the association group, to ensure fulfilment of the association group management procedure and procedure of conformity assurance under this standard.
- e) The association manager's obligation to identify and allocate necessary resources to manage the association group.
- f) Procedure of termination of the agreement signed between the association group members and the association group manager on the grounds prescribed in 8.7.6.

8.2.5 The association group management procedure shall be documented and shall include at least the following provisions;

- a) Full name, location address of the association group manager, including full name of its manager, name of the organization department and full name of the employee responsible for managing the association group.
- b) Requirements for the association group manager and description of his/her functions, including description of those functions delegated to the participants of the association.
- c) Requirements for participants of the association group.
- d) Procedure for affiliation and expulsion of the association group members, as well as leased and managed forest sites.
- e) Internal audits procedure and the procedure for correction of nonconformity revealed during such audits.
- f) Procedure for selecting members of the association group to be included in the annual internal audit plan.
- g) Procedure for keeping records related to the association group management system.

8.3 Types of association groups

8.3.1 Depending on the members of the association group, it shall be defined as a Type A or a Type B association.

8.3.2 An association group shall be defined as a type A association when the following requirements are met;

- a) the area of leased (managed) forest sites of each association group participant does shall not exceed 500,000 hectares,

- b) participants of the association group are not affiliated with each other, i.e. one of the following conditions is met:
- shares in the charter capital of the association group participants of the same owners and cross ownership of shares in the charter capital of the association group participants does not exceed 20 %,
 - association group participants are not in a single production and economic process – and the share of sales proceeds to other association group participants of each participant does not exceed 50 % in the total annual proceeds sales,
 - sole or collective executive bodies of the association group participants do not include the same persons.

INSTRUCTION – An association group may be defined as a type A association if the area of leased (managed) forest sites of the organization performing the functions of the manager of the group association exceeds 500,000 ha.

8.3.3 An association group shall be defined as a type B association if at least one of its members gets more than 50 % of the total annual sales revenues to other members or if one of the following conditions is met with respect to the members;

- shares in the charter capital of the association group participants are owned by the same owners and/or cross-ownership of shares in the charter capital of the association group participants exceeds 20 %,
- top managers of the association group participants are the same persons.

8.4 Responsibilities and authorities of the association group participants

8.4.1 Association group participants shall assist their manager in managing the association group in accordance with the association group management procedure, and shall exercise the delegated management responsibilities, if applicable.

8.4.2 Association group participants shall conduct internal audits in accordance with the association group management procedure and the agreed internal audit schedule.

8.4.3 Association group participants shall eliminate nonconformities revealed during internal audits by implementing corrective and preventive measures developed within the specified time period.

8.5 Responsibilities and authorities of the association group manager

8.5.1 The association group manager shall develop and implement a documented procedure for managing the association group as described in 8.2.5.

8.5.2 In order to comply with the requirements of 1.4.4, the association group manager shall provide training to association group members and shall provide association group members with guidance and advice to ensure their compliance with the applicable requirements hereof.

8.5.3 The association group manager shall ensure development of internal audits plans of association group members, their frequency and selection of members and facilities to be included in the internal audit plan. Planning of audits and audit procedures shall be guided by the applicable requirements of the subsection 1.8 hereof.

8.5.4 The association group manager shall assist in organizing certification activities of the certification body.

8.5.5 The association group manager shall regularly (at least once a year) review association group management results subject to provisions of the subsection 1.9.

8.5.6 By mutual agreement with the association group members, a Type B association group manager may delegate some of his/her management functions to association group participants.

8.6 Internal audit of association group participants

8.6.1 Each participant of a type A association group shall be subject to an internal audit procedure in accordance with the association group management procedure for at least 5 years. Herewith, the schedule and frequency of internal audits of each participant shall be established taking into account the risk of their non-compliance with the requirements of this standard; and the minimum quantity of leased (managed) sites to be audited at each of them, shall be determined according to the formula $x = 0.8 \cdot \sqrt{y}$, where y is the quantity of leased (managed) sites in the scope of group certification of this participant, or, if the participant is a contractor, the quantity of the forest sites in the scope of the group certification, at which this contractor performs its activities, with due consideration of the mathematical rules of rounding to the nearest whole number, but it shall be at least one.

8.6.2 In a type B association group, depending on its specifics, the main parameter to make a selection for the purpose of internal auditing plan preparation is the number and characteristics of the leased (managed) sites in the scope of association group management. The minimum quantity of these sites to be included in the annual internal audit plan shall be determined by the formula $x = 0.4 \cdot \sqrt{y}$, where y is the quantity of all leased (managed) forest sites in the scope of the association group management, with due consideration of the mathematical rules of rounding to the nearest whole number, but it shall be at least one. The selection of sites shall be based on the risk of non-compliance with the requirements of this standard if activities are carried out at these sites.

8.6.3 The group association manager, when managing a Type B association, may delegate some of his/her functions on planning and internal audit functions to its members.

8.6.4 The group association manager shall ensure preparation and implementation of the annual internal audit plan, which shall include:

- a) Name of the association group participants included in the scope of the internal audit.
- b) A list and description of the objects in the scope of forest management to be included in the internal audit plan.
- c) Dates, duration, and methods of the internal audit.
- d) Members of the audit team.

8.6.5 The association group participants included in the annual internal audit plan shall ensure access to documents, records, objects in the scope of the Forest management system for implementation of the audit program.

8.6.6 An association group participant included in the annual internal audit plan shall be informed of the audit date and audit programme at least one month prior to the audit.

8.6.7 The association group manager shall ensure preparation of the audit report based on the audit results, which shall contain at least the following information;

- a) Date and duration of the audit.
- b) Names and titles of the persons who conducted the audit.
- c) A list of facilities included in the scope of the audit,
- e) Requirements of this standard included in the scope of the audit.
- f) Description of nonconformities revealed during the audit.
- g) Description of corrective and preventive measures to eliminate or prevent nonconformities.

- h) Due date for implementation of corrective and preventive measures and persons responsible for their implementation.
- i) Description of the results of the corrective and preventive measures.

Likewise, he/she shall ensure that the audited member of the association group received the report.

8.7 Procedure for affiliation and expulsion of association group participants

8.7.1 Affiliation of a new member into the association group shall be by means of its incorporation (signing) into the association group agreement and signing the agreement with the association group manager.

8.7.2 The association group manager shall ensure internal audit of the new participant before its affiliation with the association. An organization may not join the association group until all significant nonconformities are eliminated, if such nonconformities were identified by the internal audit.

8.7.3 A member of an association group may voluntarily withdraw the membership by terminating the agreement with the association group participants and the manager. In order to do so, the association group participant shall notify the association group manager and its participants at least two months before the withdrawal.

8.7.4 The association group manager shall expel a participant from the association group if three or more significant nonconformities were revealed in relation to its certification activities as a result of the certification audit, inspection control or internal audit, or if it fails to confirm correction of significant nonconformities within the established period.

8.7.5 The association group manager shall expel a participant from the association group in case of impossibility to conduct planned internal audit due to the fault of that participant and in case of facts of violation of the subsection 1.1.2 hereof.

8.7.6 Participants of the association group shall divest the association group manager the authority to manage the association group if the results of an external audit carried by certification bodies reveal three or more significant non-compliances of his/her activity with assessment requirements or significant non-compliances were not eliminated within the established period. The authority shall be divested by means of termination of the agreements previously concluded with the association group manager within 30 calendar days from the date of appearance of the grounds for such termination.

8.7.7 The participants of the association group may determine additional grounds for revocation of the manager's authority to those specified in 8.7.6, that are specified in the agreement between the participants and the manager of the association group and in the procedure for association group management.

8.7.8 In case of revocation the association group manager of the authority to manage the association group, a new manager shall be determined within 30 calendar days from the date of termination of his/her authority or the association group shall be liquidated.

8.7.9 An association group may be liquidated by the decision of its participants or the manager. The procedure for such a decision shall be approved in the association group agreement or in the procedure for the association group management. In this case, certificates of conformity of the association group participants acquire the status of individual certificates.

8.8 Purchase and sale of timber between association group participants

8.8.1 Timber harvested from the leased (managed) forest sites included in the scope of the forest management of the association group shall preserve its certification status when transferred from one association group participant to another. Association group participants shall not confirm the conformity with the "Certification requirements for the supply chain management" of the NSFC when selling or buying such timber, provided that the requirements of Section 7 are fulfilled.

8.8.2 The group association participants shall keep records of the volumes of incoming timber by type and product groups for the timber harvested at their leased (managed) forest sites and purchased from other association group participants, as well as for the timber sold to buyers. These records shall demonstrate, that the volume of the timber sold under the "Basic" or "Expanded" status does not exceed the relevant volume of timber harvested at their leased (managed) forest sites and received from other association group participants."

**FEDERAL STATE BUDGETARY INSTITUTION
“RUSSIAN INSTITUTE OF STANDARDIZATION”
(FGBU “INSTITUTE OF STANDARDIZATION”)**

ORGANIZATIONAL STANDARD

STO NSFC.48861355-003-2023

APPROVED

General Manager
FGBU “Institute of Standardization”

_____ D.E. Mironov
November 10, 2023
[Signature, Stamp]

**National System of Forest Certification .
Certification requirements for Forest Management
System**

AGREED

**By NSFC Coordination Council
Chairman**

_____ A.S. Peshkov
November 02, 2023
[Signature, Stamp]

**Moscow
2023**

Foreword

- | | |
|---|--|
| 1 DEVELOPED | by the Federal State Budgetary Institution "Russian Institute of Standardization" (FGBU "Institute of Standardization"). |
| 2 INTRODUCED | By the Management Systems Certification Department of the FGBU "Institute of Standardization".
November 02, 2023. |
| 3 APPROVED AND ENACTED | By the order of the Director General of FGBU "Institute of Standardization" dated November 10, 2023, No 144. |
| 4 ENACTED | NEWLY. |
| 5 OKVED CODE (All-Russian National Classifier of Economic Activities) | 02.10 Forest growing and other forestry activities. |

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Introduction

This standard is aimed at realizing objectives of the voluntary certification system “National System of Forest Certification” (hereinafter - NSFC), rules for the operation of NSFC, as well as determining the requirements for the forest management system for further confirmation of compliance in the NSFC.

NSFC is registered in the Unified Register of Registered Voluntary Certification Systems (date of registration: 14.04.2023, registration number: POCC RU.B3000.04НЛС0) in accordance with the requirements of the Federal Law dated December 27, 2002 No 184-FZ “About Technical Regulation” [1].

The main purpose of NSFC operation is the assistance by methods and means of voluntary certification to;

- promotion of sustainable forest management based on requirements that meet the needs of forestry enterprises and consumers of their products, meet the criteria and indicators of sustainable development, have credibility among interested parties and citizens, and reinforce economic, social and ecological role of forests;
- general recognition of the key role of forests in social and economic development and the necessity of their careful treatment;
- fair best interest of all forestry participants and interested parties and elimination of disagreements between them;
- involvement of a wide range of interested parties with different approaches and views in NSFC to promote sustainable forest management;
- reducing forests vulnerability to the effects of economic activity and strengthening their ecological and habitat forming functions;

- sustainable, rational and economically profitable use of forest resources in the long term.

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ORGANIZATIONAL STANDARD

National System of Forest Certification. Certification requirements for Forest Management System

Национальная система лесной сертификации. Сертификационные требования к системе лесоуправления

Valid from 2023—XX—XX

1 Scope

1.1 This organizational standard specifies the requirements for the forest management system for each subsection given in STO NSFC.001-48861355-2023 [2] for the purposes of voluntary conformity confirmation with NSFC.

1.2 The requirements for forest management operations specified in this standard are aimed at insurance of sustainable forest management, which includes but is not limited to fair consideration of interests of all of the participants of the forest relationship, employees, interested and affected parties; elimination of conflicts; reduction of forests vulnerability resulting from business activities; strengthening their ecological and environment-forming functions; and sustainable, rational and economically beneficial use of forest resources in the long term.

1.3 The standard consists of the general part with the requirements for the forest management system and a special part with the basic and expanded requirements for application of the forest management system to managed forest sites (activities and process).

1.3.1 The general part establishes the requirements for the forest management system of certificate holders, including the requirements for documentation, responsibilities and authorities, planning, resources, evaluation of management plan implementation (monitoring, internal inspections and audits).

1.3.2 The basic requirements of the special part establish requirements for forest management in each area of identified risk according to STO NSFC «National Risk Assessment». These are a kind of minimum requirements that expand the requirements of the legislation in certain areas, and their fulfilment allows us to talk about achievement of certification objectives.

1.3.3 The expanded requirements in the special part establish additional requirements in the same areas as the basic ones, but they assume greater efforts and more proactive actions from the Certificate Holders to achieve the goals of certification, they also more significantly extend the legislation requirements in the field of assessment.

Certification of conformity with the expanded requirements is a way for the Certificate Holders to demonstrate their commitment to sustainable development and ESG criteria:

- commitment to the environment (English, E – environmental);
- high social responsibility (English, S – social);
- high quality of corporate governance (G – governance).

1.3.4 At own discretion, the organization may choose to certify forest management for compliance with basic or expanded requirements. Provisions of this Standard related to the expanded requirements are marked by “*” symbol.

1.4 Procedures and description of actions aimed at meeting the requirements of this standard shall be documented (development of documented procedures, programs, local regulations, etc.) only if such a requirement is directly specified in the sections of the Standard.

2 Normative references

The following normative references are used in this organizational standard:

GOST R ISO 9001-2015, National Standard of the Russian Federation. Quality management systems. Requirements.

GOST R ISO 14001-2016, National Standard of the Russian Federation. Environmental management systems. Requirements with guidance for use.

GOST R ISO 19011-2021, Guidelines for auditing management systems.

OK 034 (KPEC 2008) All-Russian Classification of Products by types of economic activities (OKPD 2).

Note — When using this standard, it is advisable to check validity of the reference standards in the public information system – with the official website of the Federal Agency for Technical Regulation and Metrology on the Internet or with the annual information index "National Standards" published as of January 1 of the current year, and with monthly information indexes "National Standards" for the current year. If the document is referenced by an undated reference, it is advisable to use the current edition of this document, subject to all its amendments. If the document referenced by a dated reference is replaced, it is advisable to use the specified edition of this document with the above year of approval (adoption). If after approval of this organizational standard, the referenced document with a dated reference was amended in the part applicable to the referenced provision, then this provision shall be applied with no regard for this amendment. If the reference document is withdrawn without any substitution, then the provision, which is referred to, is to be applied to the extent not affected by this reference.

3 Terms, definitions, and abbreviations

3.1 Terms

This organizational standard applies terms according to [3], Rules of functioning of the voluntary certification system "National System of Forest Certification" and STO NSFC.48861355-002-2023 [2].

3.2 Abbreviations

The following abbreviations are used in this organization standard:

WL	ББҮ	Wetlands
RG	БКТ	Reed grass
WHO	ВОЗ	World Health Organization
HEI	ВУЗ	Higher education institution
SFR	ГЛР	State forest register
POL	ГСМ	Petroleum, Oils, and Lubricants
IPA	КБТ	Important Plant Areas
IBA	КОТБ	Important Bird Areas of the Russian Federation

FPR	ЛПО	Forest Pathology Research;
IFA	МЛТ	Intact Forest Areas
ILO	МОТ	International Labour Organization
IUCN	МСОП	International Union for Conservation of Nature and Natural Resources
NSFC	НСЛС	National System for Forest Certification
SPFA	ОЗУ	Special Protected Forest Areas
RCPEA 2	ОКПД 2	All-Russian Classifier of Products by Type of Economic Activity
UN	ООН	United Nations Organization
SPNR	ООПТ	Specially Protected Natural Reservations
TG	ПКТ	Tame-grass
FG	ППКТ	Fern-grass
YDT	РУМ	Young Growth Tending
RF	РФ	Russian Federation
PPE	СИЗ	Personnel Protective Equipment
CITES	СИТЕС	Convention on the International Trade in Endangered Species of Wild Fauna and Flora
HPF	СВЩ	Heather Pine Forest
LPF	СЛШ	Lichen Pine Forest
MM	СМИ	Mass Media
RBCU	СОПР	Russian Birds Conservation Union
FPIC	СПОС	Free, Prior, and Informed Consent
OS	СТО	Organizational Standard
SAC	ТОПЗ	Special Area of Conservation
TPSG	ТОС	Territorial public self-government

4 General requirements

Section 1 – Requirements for Forest Management System

Subsection 1.1 – Scope

1.1.1 The organization shall define the scope of application of the forest management system.

1.1.2 The organization shall ensure that application of the forest management system is consistent for both the facilities applied for certification and the remaining facilities within the scope of the forest management system.

INSTRUCTION – The organization shall demonstrate a commitment to NSFC at all managed sites. Such sites shall not violate the basic principles of NSFC, in particular, activities at such facilities shall not damage the reputation of NSFC, discredit it, or be associated with illegal timber harvesting or trade in illegal timber, destruction of protected areas and rare species, violation of the rights of employees and affected parties, which is confirmed by absence of objective evidence on the part of authorized bodies or experts.

1.2 Interested parties

1.2.1 The organization shall identify interested parties related to the forest management system.

1.2.2 The organization shall cooperate with the interested parties in terms of the forest management system in order to fulfill the requirements hereof.

1.3 Work with contractors

1.3.1 The organization shall inform its contractors related to the forest management system about the requirements of this standard.

1.3.2 The organization shall control works of the contractors in accordance with the requirement 1.4.7 and shall involve them in the procedures on checking, identification, and elimination of nonconformities in the operation of forest management system in accordance with the Subsection 1.8.

1.4 Responsibilities and authorities

1.4.1 The Organization's management shall establish and keep up to date a documented policy that includes commitments to meet the requirements of the forest management system in accordance with the requirements of this standard, as well as its continuous improvement.

1.4.2 The policy shall be made available to the Organization's employees and interested parties.

1.4.3 The Organization's management shall:

- identify and allocate necessary resources for operation of the forest management system and fulfill the requirements of this standard,
- determine necessary qualifications of employees responsible for operation of the forest management system and fulfillment of the requirements of this standard, as well as authorize these employees with appropriate powers.

1.4.4 Management and employees of the organization involved in the implementation of the management plan shall be aware of the requirements of this standard as part of their responsibilities.

1.4.5 The organization shall ensure that employees have qualification necessary for operation of the forest management system and for them to meet the requirements of this standard, based on appropriate education, training and/or work experience.

1.4.6 Certificates of qualifications (if applicable) and records of employee training shall be available.

1.4.7. In order to implement the management plan, the work shall be directed and supervised by responsible employees.

EXPLANATION – In the context of this requirement, this means the process of decision-making, management and control of workers' activities, including operational changes in workers' activities, suspension of work, suspension of employees, if necessary.

1.5 Documented information

1.5.1 The organization shall define the documented information necessary for operation of the forest management system in accordance with the requirements of this standard.

1.5.2 To manage the documented information, the organization shall establish the following:

- a) Ways of communicating it to workers and/or interested parties, taking into account access restrictions (if applicable);
- b) confidentiality requirements;
- c) storage requirements (including storage period) and requirements for protection against loss of information;
- d) frequency of updating.

INSTRUCTION – Storage period for the documented information shall be at least five years.

EXPLANATION – Access to documented information may differ for different user groups. For example, access only to view the documented information may be possible or authorization to view and modify the documented information.

1.6 *Planning

1.6.1 Under its policy (requirement 1.4.1), the organization shall, define management objectives and targets that shall:

- comply with the requirements of this standard;
- be measurable;
- be monitored;
- be communicated to employees;
- be updated as necessary.

1.6.2 The organization shall have a management plan that is consistent with the management objectives in accordance with Annex A.

1.6.3 When planning actions to achieve the management objectives, the organization shall determine:

- what needs to be done (activities, processes, etc.);
- what resources will be required;
- who will be responsible (employees, structural units, including the person responsible for achieving the target;
- deadlines for the actions to be implemented;
- how the results will be evaluated.

1.6.4 The organization shall review and update the management plan and parts thereof within the specified time intervals, in particular, if required:

- based on the results of monitoring;
- based on the results of audits;

- based on the results of interactions with affected or interested parties;
- in connection to changes of the scope of forest management system;
- in connection to changes in social, economic, or political conditions or changes in the legislation, etc.;
- in case of changes in forest development project.

1.6.5 Summary of the management plan, excluding the confidential part, shall be publicly available.

1.6.6 If the Organization's management system is certified for compliance with GOST R ISO 9001 and/or GOST R ISO 14001 and its forest management system is included in the scope of the certificate, then its existence is a confirmation of compliance with the requirements of this section.

1.7 *Monitoring

1.7.1 The organization shall develop a monitoring program in accordance with Annex A that specifies:

- what shall be monitored;
- a description of the monitoring procedures;
- frequency and due dates;
- responsibilities.

1.7.2 The organization shall prepare an annual monitoring report that reflects:

- the extent to which management objectives and management plan have been achieved; whether there are deviations from the management objectives or management plan and their reasons;
- social and environmental impact of business activities;
- improvement measures (if necessary);
- the need for changes in the monitoring program;
- information on the implementation of improvement measures undertaken as a result of the previous year's monitoring.

1.7.3 The monitoring summary report, except for confidential information, shall be publicly available.

1.8 Inspection and control

1.8.1 The organization shall define an internal procedure for inspections, identification, and elimination of nonconformities in operation of the forest management system to ensure that the forest management system complies with:

- the requirements of this standard;
- the Organization's own requirements.

1.8.2 * The organization may provide for internal audits at least once a year when determining the internal procedure of inspections.

1.8.3 * When conducting internal audits, the Organization shall:

- plan the audit program, including frequency of audits;

- define the audit criteria and the scope of inspections for each audit;
- ensure the objectivity and impartiality of the audit process;
- ensure that information on the results of audits is communicated to the appropriate responsible employees;
- record the results of the audit – compliance or non-compliance with the requirements included in the scope of the audit;
- retain documented information on the results of audits.

EXPLANATION – See recommendations on the internal auditing procedure in Annex B.

1.8.4 When non-compliance with the requirements of this standard or the Organization's own requirements is identified, the Organization shall:

- identify the causes of the nonconformity;
- take corrective action (if possible);
- take actions to eliminate the cause of the nonconformity;
- take actions to minimize negative consequences (if possible);
- analyze the effectiveness of the corrective actions taken.

1.8.5 If the Organization's management system is certified for compliance with GOST R ISO 9001-2015 and/or GOST R ISO 14001-2016 and its forest management system is included in the scope of the certificate, its availability shall be a confirmation of compliance with the requirements of this section.

1.9 *Management analysis

1.9.1 The management of the Organization shall regularly (at least once a year) review and evaluate the forest management system and its compliance with the management policy and objectives.

1.9.2 Analysis and evaluation shall include consideration of the following:

- factors that may affect the forest management system and its compliance with the requirements of this standard;
- results of annual monitoring and audits;
- nonconformities and corrective actions;
- degree of achievement of management objectives;
- suggestions to improve the forest management system.

Section 2 – Registration, taxes and duties, countering illegal activities

Subsection 2.1 – State registration and tax registration

2.1.1 The organization shall undergo the procedure of state registration and tax registration with the authorized bodies.

2.1.2 Types of economic activities carried out by the organization on leased (managed) forest areas shall be specified in the state registration data and the possibility to perform these activities shall not be disputed by the authorized bodies.

Subsection 2.2 – Tax, duties, and lease payments

2.2.1 The Organization shall timely and fully pay for forests usage within the terms established by the lease agreement.

2.2.2 The Organization shall fulfill its tax liabilities in full and within the terms established by the applicable provisions of the current legislation.

Subsection 2.3 – Interactions with authorized bodies with regard to protection of leased (managed) forest areas from illegal activities. Countering corruption

2.3.1 The organization shall develop and implement a procedure for informing authorized bodies about illegal activities found on leased (managed) forest areas (sites) or develop and implement other measures to counteract illegal activities.

2.3.2 The organization shall develop and implement an anti-corruption policy.

2.3.3 The anti-corruption policy shall be publicly available.

Subsection 2.4 – Legal basis for use of a forest area

2.4.1 The lease agreement for the Organization's forest site, the document granting the right of sustained perpetual use of the forest site, as well as all necessary amendments thereto shall be executed in accordance with the procedure established by the applicable norms of the current legislation and have legal force.

Section 3 – Forest Management

Subsection 3.1 – Planning of timber harvesting

3.1.1 For its harvesting sites, the Organization shall establish purposes of timber harvesting depending on their form and type in accordance with the applicable provisions of the current legislation.

INSTRUCTION – For each form and type of harvesting the following shall be defined: planned result, criteria and methods for selecting trees for harvesting and leaving trees on the harvesting area.

3.1.2 The organization shall ensure that when harvesting areas in dead and damaged forest stands are selected, their boundaries coincide with the boundaries of forest pathological delineations defined in FPR (Forest Pathology Research) acts (taking into account deviations allowed by the applicable provisions of the current legislation).

3.1.3 The organization shall ensure that the percentage (intensity) of tree selection for harvesting and their species and quality composition, established by the organization during allocation and taxation of the harvesting area, depending on the form and type of harvesting, complies with the applicable provisions of the current legislation, forest management regulations and/or FPR acts.

3.1.4 The organization shall prepare a technological map for each harvesting area for harvesting of forest plantations prior to harvesting. The technological map shall be filled out in accordance with the applicable provisions of the current legislation and shall contain the necessary information.

INSTRUCTION – The required information in the flow chart shall contain the following, without limitations:

- description of the work technology and work sequence (preparatory, main and final works) specifying the equipment used;
- designation of the technological network on the scheme of harvesting area development, including the location of skidder and main drag lines, loading sites, production and domestic sites, roads and other linear objects;
- quantity of target (main) forest tree species undergrowth of which is to be preserved;
- the planned method of reforestation of the harvesting area after cutting, taking into account the actual presence of undergrowth of the target (main) forest tree species;
- information about seeding sources for the activities aiming at natural regeneration: seed trees, their groups, seed blocks or strips (if any); the location of seed trees may not be indicated on the harvesting area development scheme;
- information about biodiversity objects (if any), the location of area biodiversity objects shall be indicated on the harvesting plan.

Subsection 3.2 – Timber harvesting

3.2.1 Organization's employees performing work at the harvesting area shall be familiar with the requirements stipulated in the technological chart.

3.2.2 Organization's employees shall comply with the requirements stipulated in the technological chart and for forest tending projects during work execution.

3.2.3 The organization shall ensure that the objectives of harvesting of forest stands are achieved depending on their form and type, according to 3.1.1.

EXPLANATION – Achievement of objectives shall be evidenced by compliance with the parameters set out in the management plan for the specific form and type of harvesting, including selection for harvesting and leaving trees on the harvesting area.

3.2.4 The organization shall ensure that the actual volume of timber harvested by the organization on the leased (managed) area (according to the forest use report) does not exceed the volumes (split by forest units), specified in the forest development project, and the actual volume of timber harvested by the organization on a separate harvesting area – as specified in the final inspection act of the harvesting area.

3.2.5 *The organization shall determine the annual sustainable timber harvesting volume for each leased (managed) forest area by farms, which is made up of sustainable timber harvesting volumes for the relevant economic sections, for protective and operational forests, for clearcuts and selective cutting of mature and overmature stands for a period not less than the cutting age (calculation period).

EXPLANATION –

- 1) The annual sustainable volume of timber harvest may be determined separately for each type of selective cutting, as well as for several management sections with the same cutting age combined into one group.
- 2) If in one forest district the Organization's forest management area includes several leased forest sites, it is possible to determine the annual volume of sustainable timber harvesting as the sum of these lease agreements.

3.2.6 *The organization shall use forest inventory materials not older than 15 years to determine the annual sustainable volume of timber harvesting. If the forest inventory materials for the leased (managed) forest areas of the organization are older than 15 years, the organization shall update these materials in accordance with Annex C.

3.2.7 *When determining the annual sustainable volume of timber harvesting, the areas of forest plantations shall be excluded from the calculation if they occupy more than 5 % of the forest area of the leased (managed) forest site:

- lost as a result of natural phenomena (forest fires, windfalls, disease centers) and other reasons, not accounted for by the materials of the last taxation;

- areas with voluntarily imposed restrictions of the utilization regime in accordance with the requirements of this standard.

At the same time, the calculation of annual sustainable timber harvesting volume shall be performed in accordance with the subsection 3.2.8 hereof.

3.2.8 *Calculation of annual sustainable timber harvesting shall not allow:

- for clearcuts and progressive cuttings in hardwood forests – reduction of this volume for any year during the calculation period;
- for clearcuts and gradual cuttings in coniferous forests – violation of the restrictions established in Annex B;
- selective cutting of mature and overmature stands – excess of this volume over the average annual increment for each economic section (group of economic sections or farm).

3.2.9 *The actual annual volume of liquid timber harvesting for all types of harvesting of mature and overmature stands shall not exceed the annual sustainable timber harvesting volume for each farm.

EXPLANATION –

1. It is allowed to exceed the actual annual volume of timber harvesting over the non-destructive volume subject to non-exceedance of the value of the total three-year non-destructive volume of timber harvesting for the last three years.
2. A difference of up to 10 % (by volume) between the annual volume of sustainable timber harvested and the actual annual volume of timber harvested due to inaccuracies in forest inventory data, in harvesting areas and in the accuracy of measurement of harvested timber volumes is allowed.

3.2.10 The organization shall ensure removal of business and firewood assortments from harvesting areas after harvesting before the end of the validity period of forest declarations.

Subsection 3.3 – Forest regeneration

3.3.1 The organization shall annually collect information on areas that need to be regenerated.

3.3.2 The organization shall plan and carry out activities on forest regeneration in accordance with the forest development project and forest regeneration project, taking into account the materials of the allotment and post-cutting surveys.

3.3.3 The organization shall take care of forest crops and young growth at intervals and within the time periods specified in the forest regeneration project.

EXPLANATION – The timing of measures may be adjusted based on the results of the inventory.

3.3.4 The organization shall collect, analyze and document information on forest areas where measures have been completed related to forest regeneration and compliance with the time periods established in accordance with the applicable provisions of the current legislation based on the results of surveys aimed to classify the lands intended for forest regeneration as forest lands.

3.3.5 The organization shall prepare new forest regeneration projects for areas with conducted forest regeneration activities that have not been transferred to forest lands within the established period of time.

Subsection 3.4 – Forest tending

3.4.1 The organization shall annually collect information on areas in need of forest management.

EXPLANATION – This information shall include information on areas converted to forested land as a result of forest management activities.

3.4.2 Before drafting the forest management project, the organization shall conduct a field survey of the forest area and take its results into account when drafting the project.

3.4.3 The organization shall carry out forest care activities in accordance with the developed forest tending project, taking into account corrections based on the inventory results.

3.4.4 The organization shall ensure that harvesting targets (including intensity of harvesting, percentage of target species selected, species composition, condition of plantations after harvesting) stipulated by the forest tending project are met.

3.4.5 The organization shall take into account the applicable requirements of Subsection 3.1 when performing harvesting for forest tending purposes.

Subsection 3.5 – Conservation and protection of forests

3.5.1 The organization shall carry out fire protection measures in forests with the scope and timeline stipulated by the forest development projects.

3.5.2 The organization shall provide work sites with fire extinguishing equipment in accordance with forest development projects.

3.5.3 The organization shall instruct employees on compliance with the requirements of forest fire safety rules, as well as on the methods of extinguishing forest fires, before the start of the fire season.

3.5.4 The organization shall store harvested timber on leased (managed) forest areas in accordance with the requirements of forest sanitary and fire safety rules.

3.5.5 The organization shall cut dead and damaged forest stands in accordance with the applicable provisions of the current legislation and Annex D.

3.5.6 When reasonably requested, the organization shall provide the following information about planned or conducted harvesting of dead and damaged forest stands on the organization's website and/or on the information resource of the certification system:

- a) FPR (Forest Pathology Research) acts;
- b) Annex 4 to the forest declaration “Scheme(s) of location of harvesting area, forest infrastructure facility, timber processing infrastructure, and non-forest infrastructure facilities” in respect of harvesting areas with designated harvesting of dead and damaged forest stands, including photo-fixation data and their geographical reference for each harvesting area;
- c) inspection certificates of harvesting areas with harvesting of dead and damaged forest stands.

EXPLANATION – Reasonable request means that it shall include evidence describing indications confirming that the location of harvesting areas does not correspond to the actual location of areas with dead and damaged stands, or that there are no grounds for prescribing harvesting of dead and damaged stands, or that the form of harvesting of dead and damaged stands does not correspond to the nature and degree of damage to the stands.

Section 4 – Environmental effects

Subsection 4.1 – Protected areas (sites) and species

4.1.1 The organization shall comply with the regime of use, protection, care and reproduction of protective forests and specially protected forest areas in accordance with the applicable provisions of the current legislation.

EXPLANATION – When planning economic activities, the organization does not violate the boundaries and restrictions related to economic activities of protected areas (sites).

4.1.2 The organization shall comply with the regime of water protection zones and coastal protective strips in accordance with the requirements of the Water Code.

4.1.3 For rivers 10 to 25 km long, the Organization shall exclude cutting within the boundaries of water protection zones (except for cutting of dead and damaged forest plantations, construction of infrastructure facilities).

4.1.4 The Organization shall comply with the regime of protection and use of protected areas and protected zones of protected areas (if any) located on the territory of leased (managed) forest areas.

4.1.5 By means of interaction with the interested parties (with authorized bodies responsible for the creation of Specially Protected Natural Reservations, involving interested parties proposed to create this Specially Protected Natural Reservation), as well as with experts (if necessary), the Organization shall determine and take measures to ensure preservation of the values of the designed SPNRs, for the sake of which these SPNRs were proposed to be created.

4.1.6 The organization shall develop and implement measures to preserve natural values of intact forest areas (IFAs) in accordance with Annex E.

4.1.7 The organization shall develop and implement measures to preserve natural values of wetlands (WLs) in accordance with Annex E.

4.1.8 The Organization shall develop and take measures to preserve natural values of Important Bird Areas of the Russian Federation (IBAs) in accordance with Annex E.

4.1.9 The Organization shall work to identify rare ecosystems and develop and implement measures to preserve natural values of rare ecosystems in accordance with Annex E.

4.1.10 *The organization shall develop and implement measures to preserve natural values of Important Plant Areas (IPAs) in accordance with Annex E.

4.1.11 *The organization shall develop and implement measures to preserve natural values of Special Area of Conservation (SACs) in accordance with Annex E.

4.1.12 The organization shall map the boundaries of protected areas (sites).

4.1.13 *The Organization shall ensure that the total area of the protected areas (sites) specified in subclauses 4.1.1 – 4.1.12 is not less than 10% of the area of the leased (managed) site or sites.

4.1.14 *The organization shall ensure that mosaic structure of the harvesting area is preserved during clear felling (as well as after the last successive felling) of more than 15 ha as follows:

- by means of preserving strips and separated forest stands at least 30 m wide within the harvesting area boundaries. The share of the strips and clumps shall be at least 5 % of the harvesting area,
- (in addition to strips and separated forest stands within the harvesting area boundaries) by means of availability of forest stands adjacent to the harvesting area (except for young trees, and for commercial forests – except for mature and overmature stands),
- any protected areas (sites) – Specially Protected Natural Reservations (SPNRs), protection forests, Special Protected Forest Areas (SPFAs), voluntarily preserved ones, as well as others excluded from economic use,
- commercial forests,
- sites with selective felling,
- undercuts of previous years.

If there are such areas in a 50 m wide strip adjacent to the harvesting area along its perimeter, then this entire area and these sites may also be included in the calculation of the share of areas to be preserved for the purpose of mosaic structure of sites. The share of the retained strips and separated forest stands within and outside the harvesting area shall be at least 10 % of the harvesting area.

EXPLANATION –

1. It is allowed to include timber stands – seed blocks and strips, key habitats, other NE (HΘ) preserved with any purpose – into the area of the specified strips and separated forest stands.
2. The requirement shall also be considered met for the harvesting areas with completed harvesting where at least 20 seed trees of the target species are preserved.
3. The organization may use both methods, for example, one method on one harvesting area and another method on the other one.

4.1.15 The organization shall prepare a list of rare, and endangered species that may occur on leased (managed) forest areas and shall take measures to conserve them by protecting key habitats in accordance with its procedures. The organization may stipulate other measures for conservation of these species in these procedures.

4.1.16 As part of their duties organization's employees shall be aware of the requirements of the procedures for identification and conservation of key habitats.

4.1.17 *The organization shall, at least once per certification cycle, assess preservation of established and potential habitats of the most vulnerable rare and endangered species. Recommendations for conducting such an assessment are given in Annex E.

EXPLANATION – Most vulnerable rare and endangered species may include species that have a high category of rare or endangered status, that are of limited adaptability to certain conditions (e.g., moisture), that require a large buffer zone (e.g., to conserve nesting habitat for some raptor species, the buffer zone is 500 m wide).

4.1.18 *The organization shall, taking into account experts' opinion, identify and comply with management restrictions for the habitats of rare and endangered species identified under the requirement 4.1.17.

4.1.19 *The organization shall map the habitats of rare and endangered species identified in accordance with the requirement 4.1.17 and then update them, including as a result of meeting the requirement 4.1.18.

4.1.20 The organization shall determine the presence of species of trees, shrubs, lianas to be preserved in accordance with the forest management regulations (development project) and take measures to preserve them during harvesting operations.

Subsection 4.2 – Environmental impact

4.2.1 The organization shall develop instructions that contain measures to prevent and/or minimize adverse impacts on soil and water bodies during economic activities. These measures shall include, at least, measures aimed at fulfillment of requirements 4.2.3 – 4.2.8.

4.2.2 Employees of the organization within the scope of their duties shall be aware of and comply with the requirements of instructions developed in accordance with requirement 4.2.1.

4.2.3 When carrying out works in water protection zones and on coastal shelter belts, as well as during construction, maintenance and operation of road infrastructure facilities, the Organization shall take measures to prevent and/or minimize pollution of water bodies with soil.

4.2.4 When carrying out economic activities, the Organization shall take measures to prevent and/or minimize compaction and damage to soil.

4.2.5 The Organization shall take measures to prevent and/or minimize soil erosion on slopes.

4.2.6 The Organization shall take measures to prevent and/or minimize pollution of soil and water bodies by waste and petroleum, oil, lubricants (POLs).

4.2.7 The organization shall remove waste from the work sites if and when the waste accumulation tanks are filled up and upon completion of works.

4.2.8 The organization shall equip POL storage and refueling points in accordance with the rules of fire safety in forests.

4.2.9 The Organization shall carry out land recultivation in cases stipulated by applicable current legislation.

4.2.10 The Organization may use alien crops only when there is a justification for their use, there is experience in their use and/or the results of scientific research show that it is possible to control their impact on the ecosystem.

4.2.11 The organization shall develop and implement control measures for the alien crops used that ensure their non-proliferation beyond the sites where they are used.

4.2.12 If pesticides and/or agrochemicals are used, the Organization shall monitor the process of their use and take measures to prevent and/or minimize adverse environmental impacts.

4.2.13 Pesticides containing active ingredients classified as Class 1A and Class 1B by the World Health Organization (WHO) shall not be used unless no other effective means are available.

4.2.14 The Organization shall ensure that pesticides and/or agrochemicals are handled by trained workers, in accordance with occupational health and safety requirements and the pesticide and/or agrochemical manufacturer's recommendations for their transportation, usage and storage.

4.2.15 When handling pesticides and/or agrochemicals, the organization shall keep records that include trade name, active ingredients of pesticides and their content, composition of agrochemicals, method and dosage of application, quantity of pesticide and/or agrochemical to be used, period, place and justification for application of pesticides and/or agrochemicals.

Subsection 4.3 – *Contribution to the global carbon cycle

4.3.1 The organization shall not carry out marshland reclamation or peat extraction at bogs.

4.3.2 The organization shall not remove cuttings from the harvesting area, grubbing, removal and disposal of tree stumps except for soil preparation, construction of infrastructure facilities, or in other justified cases.

Section 5 – Labour rights

Subsection 5.1 – Occupational safety and health

5.1.1 The organization shall have a work safety service or a job position of a work safety officer.

EXPLANATION – If there are less than 50 employees in the organization, the head of the organization, other authorized employee working under a part-time basis or an individual entrepreneur providing services in the field of occupational safety may function as a work safety service.

5.1.2 The organization shall develop and approve the Regulations on Occupational Health and Safety Management System.

5.1.3 The organization shall assess occupational risks at workplaces and in relation to the work performed.

5.1.4 Employees of the organization shall be acknowledged and accepted the results of the assessment of occupational safety hazards at workplaces.

5.1.5 The organization's manager and employees shall be trained and tested on occupational safety and health in accordance with the current applicable legislation.

5.1.6 The organization shall ensure that its employees are provided the following induction and that records on such instructions are available:

- induction training at the time of employment;
- initial workplace briefing before the start of work;
- refresher workplace briefing.

5.1.7 The organization shall develop and approve training and briefing programs on occupational safety.

5.1.8 Employees of the organization, performing hazardous works, before starting unrestricted work, shall undergo training according to the training program approved by the employer, there shall be records of the training and clearance orders approved by the employer allowing independent work based on the results of the training.

5.1.9 Employees of the organization (drivers of logging machines, drivers of timber loading machines, tree fellers, delimiters, crosscutters) shall undergo vocational training and shall have certificates of such training.

5.1.10 The organization shall develop occupational safety instructions for workplaces and works to be performed.

5.1.11 The organization shall develop standards of distribution of personal protection equipment to personnel in accordance with the identified occupational risks and hazards. Standards of distribution of personal protection equipment to personnel shall contain information on the types of PPE given, their application (wear) periods, calendar periods of PPE distribution.

5.1.12 The organization shall ensure that PPE stipulated by the organization's PPE distribution standards is given to employees within the established time periods and that records of PPE distribution are available in due form distribution cards.

5.1.13 Employees of the organization shall know and comply with the occupational safety requirements.

EXPLANATION – Occupational safety and health requirements when performing work include, but not limited to:

- establishment of hazardous area boundaries, restrictions and prohibitions associated with them;
- use of PPE;
- compliance with work sequencing procedure and requirements for each work stage.

5.1.14 The organization shall provide workplaces and personnel facilities with adequate fire extinguishing equipment and first aid kits.

5.1.15 The organization shall keep a documented record of occupational accidents, develop and implement corrective actions to prevent accidents in future.

Subsection 5.2 – Key labor requirements

5.2.1 The Organization shall conclude employment contracts with employees in accordance with the procedure and under the terms and conditions established by the requirements of the Labor Code.

5.2.2 The organization shall not discriminate against employees and at employment.

5.2.3 The organization shall provide employees, if necessary, with conditions for accommodation, rest, and heating.

5.2.4 The organization shall pay wages and other payments in accordance with the procedure established by the provisions of the labor legislation and the agreement signed between the organization and an individual person.

5.2.5 The Organization shall pay for the contractors' work in accordance with the agreements signed.

EXPLANATION – Compliance with this requirement may be evidenced by information received from the contractor on the Organization's compliance with its obligations.

5.2.6 The Organization shall develop and implement a procedure of processing of employees' applications and disputes.

5.2.7 The organization shall maintain documented records of the applications and disputes, which shall include the following information:

- information about the applicant;
- date of registration and summary of the application;
- review duration;
- measures taken to resolve, settle;
- date and method of informing the applicant about the results of the review.

5.2.8 Disputes with employees have been resolved or are in the process of being resolved.

Section 6 – Rights of the affected parties

Subsection 6.1 – Identification of the affected parties, their rights and interests

6.1.1 The organization shall develop a procedure describing the process for interaction with the local community to identify affected parties, their rights, interests, process their applications and resolve disputes (including compensation and damage issues), including consultations with representatives of the local community.

NOTE – This procedure involves interaction first of all with representatives of local government bodies (head of the municipality, local administration, deputies, territorial public authorities, headmen); if necessary, with representatives of organizations and institutions (organizations of indigenous peoples or other ethno-cultural or ethno-confessional groups, hunting communities, peasant farms, schools, museums, etc.) or directly with local residents.

6.1.2 The organization shall provide the local community with an opportunity to obtain information about current and planned economic activities, an opportunity to inform the organization about their rights and interests that are or may be affected by the economic activity, and the procedure for interaction with the organization.

EXPLANATION – Informing shall be in ways accessible to the local population: on the organization's website, in local mass media, at the administration of municipalities, at forestry section or by other accessible methods. Informing shall take place when planning economic activities in one or another part of the leased (managed) area, the regularity and method of informing shall be determined through interaction with representatives of local government bodies (head of the municipality, local administration, deputies, territorial public authorities, headmen) taking into account the range of economic activities, as well as by other means that allow necessary information to be given to the local population.

6.1.3 *The organization shall provide the local community with an opportunity to obtain the information about the following;

- which of their rights can be taken into account when planning and conducting business activities, which of them may be affected;

- what obligations the local community has within the framework of interaction with the organization;
- what social economic support measures are implemented by the Organization in accordance with 6.2.6.

EXPLANATION – Commitments of local communities within the framework of interaction with the organization include:

- provision of documentary evidence of rights, as well as timely provision of information in response to the Organization's requests to identify and observe the rights of the local population,
- compliance with the Forest Sanitary Safety Rules, as well as other obligations related to the stated above.

6.1.4 The organization shall identify affected parties and their rights, determine their interests by implementing an interaction procedure.

EXPLANATION – The organization shall identify rights of affected parties by using information contained in documentary evidence of those rights provided by the affected parties. The organization may use a variety of written sources, including requests for information from local municipal administrations, as well as the results of surveys, interviews, and conversations with representatives of the local community.

6.1.5 The organization shall keep records of identified affected parties and their documented rights, as well as cases of violations of affected parties' rights and disputes. The records shall include the following information:

- information about the applicant;
- date of registration and summary of the application;
- review duration;
- measures taken to resolve, settle;
- date and method of informing the applicant about the results of the review.

6.1.6 The organization shall retain the information collected during the period of validity of the certificate and shall ensure, if applicable, that the records are kept confidential and unaltered.

Subsection 6.2 – Identified rights of affected parties and business operations

6.2.1 When planning and conducting business activities, the Organization shall not allow infringement of the identified rights of the affected parties and shall take into account interests of the affected parties, including by amending business activities plans.

6.2.2 *In the event the rights identified in accordance with 6.1.4 in relation to the territories or resources of indigenous communities in those territories may be affected by the proposed economic activity, the organization shall, prior to its commencement, obtain consent in accordance with the procedures specified in Annex F, or suspend it if the activity is already being fulfilled.

EXPLANATION – The provisions of this requirement are intended to protect traditional state of life and livelihoods where they are threatened. Obtaining consent for planned economic activities is necessary when other mechanisms are insufficient to protect rights – e.g., interaction procedures, designation of areas of special cultural, environmental, economic, religious or spiritual value, etc. Obtaining such consent complements, but does not replace, these mechanisms.

6.2.3 Where appropriate, the organization shall identify sites that have special cultural, environmental, economic, religious or spiritual value for the affected parties, and shall determine with the affected party the use regimes for these sites and shall comply with them. The boundaries of the identified sites shall be mapped.

6.2.4 In case of violation of the rights of the affected parties, the Organization shall determine the necessary actions aimed at:

- mitigation of negative consequences (if possible);

- preventing violation of rights in the future;
- restoration of violated rights (if possible).

In case of realized material damage to the property, resources and living conditions of the affected parties caused by the organization's activities, the organization shall compensate it.

6.2.5 Disputes arising shall be considered and resolved or are being under pre-court examination or in a judicial proceeding.

EXPLANATION – When using a pre-court dispute settlement mechanism, the affected party shall provide evidence of the violation of its rights. Pre-court dispute settlement may result in solutions mutually acceptable to all parties, including compensation. Pre-court dispute settlement shall have no deliberate delay on the part of the organization. In the event that one of the parties to a dispute has a claim related to the implementation of pre-court dispute settlement, that party may utilize judicial procedure.

6.2.6 * By means of interaction with affected parties, the organization shall identify possible measures to support the local community socially and economically.

EXPLANATION – When determining measures for social and economic support, the Organization may proceed from its capabilities and indicators of the scale of economic activity in the context of division of economic activity into the categories of small, medium and large businesses. The criteria for categorizing enterprises as small, medium and large businesses are established by Government Resolution No. 265 dated 04.04.2016.

For small and medium-sized business organizations, activities on socio-economic support of the local population may include: support of local social and cultural initiatives, targeted financial or non-financial assistance, participation in maintenance of local infrastructure, provision of fuelwood to the population, etc. Such support may be provided, including through agreements with heads of local administrations or other means.

For large business organizations, activities on socio-economic support of the local population may additionally include: implementation of social educational projects or participation in implementation of such projects; participation in employment programs for the local population; financial and non-financial participation in regional and municipal social programs; implementation of charitable assistance programs; voluntary medical insurance of employees; comprehensive measures to improve conditions of work; development and maintenance of social and economic development of the local population; and social support of the local population. Plans to implement such activities are usually documented through social and economic partnership agreements or other binding agreements or reflected in the organization's social and economic strategy.

6.2.7 * The Organization shall implement agreed measures in accordance with 6.2.6 in the absence of objective obstacles beyond its control to their implementation.

Section 7 – Accounting for timber and timber transactions. Storage and transportation of timber

Subsection 7.1 – Accounting for timber and timber transactions

7.1.1 The organization shall keep internal records of all timber harvested on the territory of leased (managed) forest areas, as well as of purchased timber. The organization shall keep the following documented information up to date:

- location (lease agreement number, forestry section, district forestry section, quarter, mapping unit) and date (period) of harvesting;
- type of product (code according to the All-Russian Classifier of Products by Type of Economic Activity);
- species;
- volume;

- name of the supplier (if applicable);
- information on source accounting documents for timber;
- information on trade and shipping documents.

7.1.2 The organization shall eliminate mixing of timber harvested from certified leased (managed) forest areas with timber from other sources, and shall eliminate the possibility of supplying timber with statement if such mixing has occurred. In case timber from other sources was mixed with certified timber, or sold as certified timber, the organization shall:

- notify its certification body and the purchaser of the sale/mixing within five working days;
- analyze causes of the sale/mixing;
- submit a corrective action plan to the certification body within thirty days.

7.1.3 The Organization shall keep records of timber volumes by type and product groups harvested from leased (managed) forest areas, purchased from suppliers, sold to buyers, demonstrating that the volume of timber sold with the status “Basic” or “Expanded” does not exceed the respective volume of harvested timber.

Instruction – If the Organization not only harvests, but also purchases timber, it shall maintain separate records of the volume of timber purchased from suppliers.

7.1.4 The Organization shall develop and implement a documented procedure that describes how timber harvested from leased (managed) forest areas and purchased timber (if applicable) shall be accounted for, stored and moved, including procedure of mixing detection.

7.1.5 When selling timber with the certification status, the organization shall include the following information in trade and shipping documents:

- certificate code;
- statement of compliance with the “Basic” or “Expanded” status.

Trade and shipping documents for all timber sold under Basic or Expanded status shall be kept by the organization for five years minimum.

7.1.6 The organization shall comply with the requirements of the CITES convention.

Annex A (normative)

Planning*. Monitoring*

A.1 Planning

A.1.1 Any organization is an economic system operating under uncertainty and changes. Even in the most detailed plan it is not possible to 100 % foresee development of events and to guarantee that the plan will be fully implemented. Actual and expected results may differ for many reasons: incorrect underlying assumptions, poor performance of actions, change in environmental conditions, etc. Therefore, in implementing the management plan, information must be regularly collected and analyzed to adjust management decisions as management results become more evident and understood.

Management based on *Plan – Do – Check – Act* (PDCA) approach represents a cyclic process used to achieve continuous improvement which is described in Figure A.1.

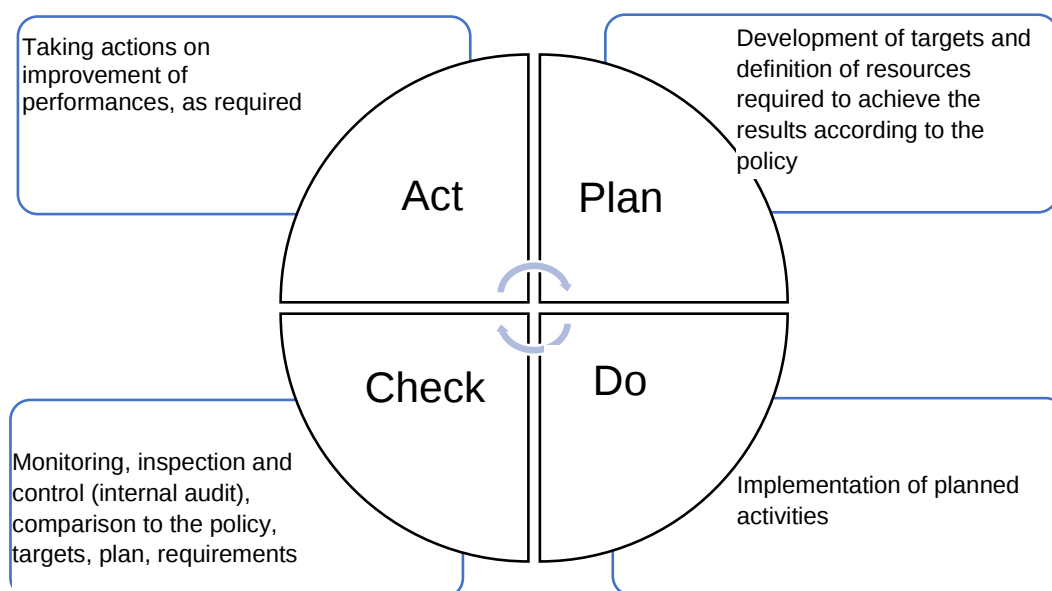


Fig. A.1 – Management cycle based on achievement of improvements

A.1.2 Planning is a future-oriented, systematically prepared, regularly recurring process of information processing and decision-making.

A.1.3 Planning shall include:

- policy formulation;
- definition of targets and target indicators;
- definition of resources to achieve targets;
- definition of factors that may affect implementation of the management plan and achievement of targets;
- definition of environmental and social impact of the planned business activities;
- development of monitoring system.

A.1.4 The result of planning is the management plan. The Planning flow chart is shown in Fig. A.2.

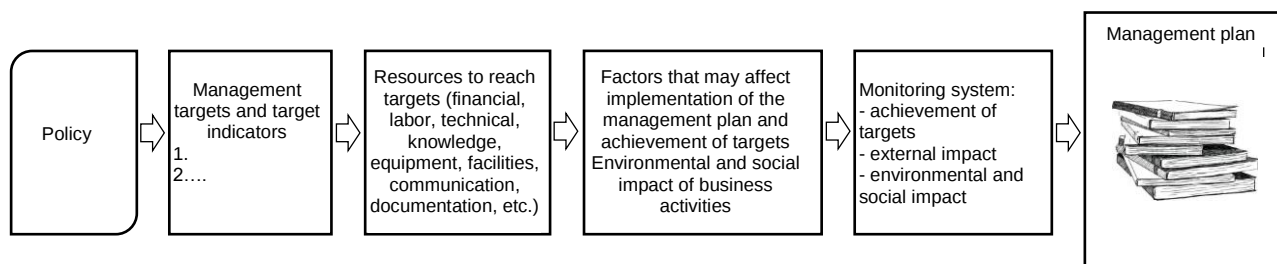


Fig. A.2 – Planning flow chart

A.1.5 The planning scope of the organization shall include aspects reflected in this standard, as well as others the company considers important, including:

- implementation of the management system based on continuous improvements;
- enforcement of legislation;
- sustainable forest management;
- forest conservation, protection, regeneration of forests;
- preservation of biodiversity;
- reduction of environmental impact;
- safety and health;
- observance of employees' rights;
- training of employees;
- interaction with interested parties;
- observance of rights of affected parties;
- support of local community.

A.1.6 When defining targets and target indicators it is important to bear in mind that they should be measurable and monitorable. A target may be formulated in such a way that a target is already included in the goal formulation. If the formulation of the objective does not include a target, targets should be set for such objectives. There may be several indicators, but the number of indicators should not be unnecessarily increased. The wording and number of targets should allow for the assessment of progress in target achievement and reflect key results.

Examples

1. Target with included target indicators:

Maintaining the proportion of protected areas (sites) of at least 10 % of the managed forest area.

2. Target without included target indicators:

Maintaining a network of protected areas (sites).

Target indicators:

The share of conservation areas (sites) is at least 10 % of the area of managed forest areas.

There are no cases of violation of the regime established for protected areas (sites).

A.2 Monitoring

A.2.1 For monitoring purposes (monitoring flow chart is shown in Fig. A. 3) a set of indicators should be created, reflecting:

- 1) achievement of targets;
- 2) environmental and social impact of business activities;
- 3) factors (legal, competitive, market, social, environmental, etc.) that can affect implementation of the management plan and achievement of the organization's targets.

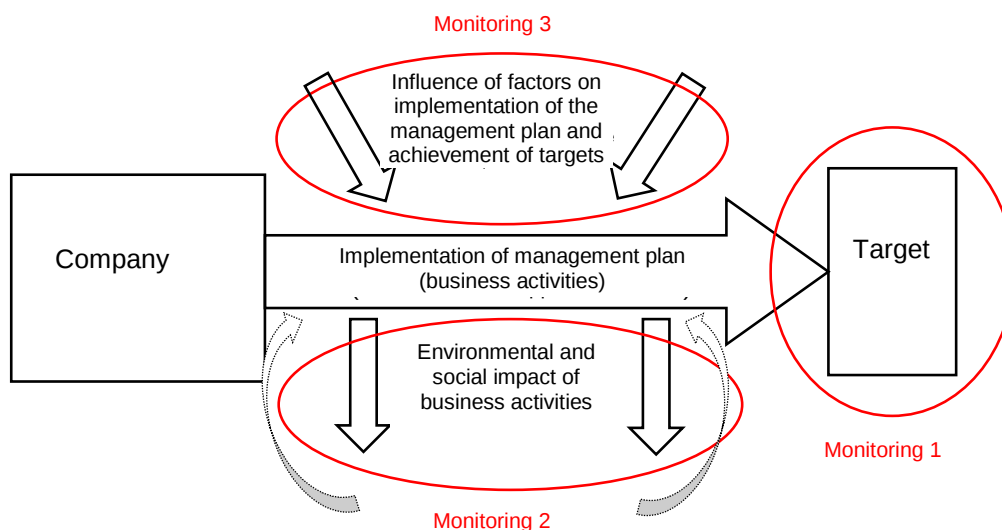


Fig. A.3 – Monitoring flow chart

A.2.2 Monitoring of targets achievement

In order to monitor fulfillment of the management plan objectives, the monitoring program shall contain indicators reflecting the degree of target achievement – target indicators (information about target indicators is shown in the Section Planning).

A.2.3 Monitoring of environmental and social impact of business activities

The indicators for assessment of environmental and social impact of business activities shall be developed in such a way as to focus on identification of the most significant and important impacts, including adverse impacts.

A.2.4 To identify environmental impacts of economic activities, the scope of monitoring should include (if applicable):

- impact on soil (pollution, erosion, etc.);
- impact on water bodies (pollution, littering, disturbance of a river bed, etc.);
- impact on values of conservation areas (violation of the established regime, damage or loss of values, identification of new areas (sites), etc.);

- impact on rare and endangered species (damage or destruction of habitats, identification of new habitats, etc.);
- impact on forest ecosystems (productivity, growth, logging volumes, etc.).

A.2.5 To identify social impacts of economic activities, the scope of monitoring should include (if applicable):

- illegal/unauthorized actions not related to the organization's operations (e.g., illegal felling, hunting, fishing (poaching), land grabbing, development or settlement of lands, waste disposal, etc.);
- impact on affected parties (e.g., violation of affected parties' rights, disputes and complaints, social and economic support to local communities, etc.);
- impact on employees (for example, violation of employees' rights, failure to observe safety and health requirements, disputes and complaints, wage increases, improvement of working conditions, training, etc.);
- impact on areas of special cultural, environmental, economic, religious or spiritual value to the affected parties (e.g., damage or destruction of site values, identification of new sites, etc.);

Examples

1. Indicators reflecting the environmental impact of business activities

Number of cases of violation of soil mitigation requirements and types of violations.

Number of cases of violation of the regime established for the conservation areas (sites), types of violations, area of disturbed sites.

2. Indicators reflecting the social impact of business activities

Number of measures to provide assistance to the local community with indication of their types and volumes.

Number of disputes and complaints from local communities, including those resolved, types of disputes and complaints.

A.2.6 Monitoring of factors which may impact implementation of the organization's management plan

To conduct this type of monitoring, an organization should determine what factors may significantly affect implementation of the management plan and achievement of objectives. These may be legal, competitive, market, social, environmental or other factors.

Monitoring of some factors may already be incorporated into the organization's other work processes and may not require additional procedures or documentation.

Example

Changes in legislation can be monitored by the organization's legal department, or by a lawyer or other professionals as part of their duties by means of access to a legal reference system or other means.

A.2.7 Monitoring of some factors may require additional efforts and documentation. For example, if the organization has identified a new interested party, the information should be reflected in a document that includes a list of interested parties.

Example

Indicators reflecting the external impact.

A list of identified interested parties indicating their impact.

Number and area of outbreaks of mass reproduction of forest pests.

A.2.8 When planning monitoring, it is recommended to analyze and use already existing procedures for collecting and analyzing information. For example, the organization prepares and submits reports on forest use, forest reproduction and afforestation and others to the state authorities. These procedures and reports can be used as part of monitoring. The company may have ESG¹ reporting system in place, information from which can also be used in planning or monitoring.

A.2.9 In addition to its own sources of information, the organization may use data from external sources – executive authorities, scientific organizations, second or third party audit reports.

A.2.10 The methods of monitoring may be different: analysis of documentation, satellite images, field studies and others.

A.2.11 When planning monitoring, it is recommended to conduct a self-assessment on the questions listed in Table A.1, the answers to which will allow to successfully plan and conduct monitoring, as well as to provide necessary explanations during audits and inspections.

Table A.1 – List of checklist questions

- What is to be monitored – which facilities, processes, factors, etc.?
- What parameters, indicators will be established for them?
- What data have already been collected and analyzed by the organization and can be used for monitoring?
- What data from external sources could be used?
- What additional monitoring procedures need to be implemented?
- What indicators should be established for monitoring of selected facilities?
- What is the periodicity of data collection?
- What is the time frame for data collection?
- Who collects and provides data, from what sources?
- What is the form of the collected data (what form is it to be filled in)?
- Who stores the collected data and in what form?
- To whom are the collected data to be transferred?
- Who is responsible for the data collection stage?
- Who is responsible for the data analysis stage?
- Who will analyze the data and prepare proposals for corrective actions?
- What does data analysis include, for example: comparison with the established criteria;

¹ Environmental, Social, and Corporate Governance, ESG, is a set of characteristics of company management that achieves the involvement of the company in solving environmental, social, and governance problems.

comparison with previous data or otherwise?

- What is the timeframe for analyzing the data and preparing corrective action proposals?
- Who is responsible for preparation of the annual monitoring report?
- To whom is the monitoring report to be provided?
- Who approves the report and within what time period?
- Who identifies and selects opportunities for improvement based on monitoring?
- How are changes entered in the management plan to implement improvements?
- How are changes to the management plan communicated to employees?
- Who is responsible for preparation of the public report?
- What information is necessary and appropriate to include in the public report?
- What information in the monitoring report will be of interest and importance to the affected parties?
- What information is confidential and should not be disclosed in the public report?
- When and where should the public report be posted?
- Who is responsible for posting the public report?
- Do any affected parties need to be sent a hard copy of the report?
- Who is responsible for the entire monitoring process or for specific areas of monitoring?

Annex B **(informative)**

Internal audit

B.1 Internal audit

B.1.1 Internal audit is a part of an organization's internal audit procedure and is a tool for determining whether an organization's management system meets specified criteria.

The internal audit includes several stages:

- planning;
- preparation;
- audit;
- post-audit activities.

The company should arrange the internal audit as follows.

B.1.2 At the planning stage an audit program shall be developed which, among other things, takes into account the results of the management analysis (1.9), non-conformities (1.8.4) identified during previous audits, the forest management system area, including involvement of contractors (subcontractors). The audit program shall be approved and communicated to the responsible employees involved in the program implementation.

B.1.3 At the preparation stage, a lead auditor shall be appointed for each audit and an audit team shall be formed (if necessary, as the audit may be conducted by one auditor depending on the sphere and scope of the audit). When forming the audit team, it is important to observe the principle of objectivity and impartiality of the audit. Therefore, audits should be conducted by personnel who are not involved in the audited activity, or third-party independent auditors should be engaged.

The audit plan shall be prepared including:

- scope and criteria of the audit;
- place and dates of the audit.

B.1.4 The audit plan shall be approved and the heads of the audited units and other responsible employees shall be familiarized with it.

B.1.5 The internal audit stage includes:

- introductory meeting;
- check and getting the audit evidence;
- assessment of conformity with the established requirements;
- discussion and recording of the audit results;
- final meeting;
- preparation of the audit report by the lead auditor;

- distribution of the report to the heads of audited departments and other responsible employees.

B.1.6. After receiving the report and in case of identified nonconformities heads of the audited departments and other responsible employees shall organize the development of an action plan to address nonconformities in accordance with requirement 1.8.4 of this standard. The action plan shall include a list of measures indicating due dates and persons responsible for fulfillment of measures. Responsible employees shall control the implementation of the action plan.

Records of internal audits shall be kept by responsible employees and shall include:

- audit(s) program;
- audit plan;
- audit report;
- action plan to address nonconformities;
- materials on the implementation of measures to deal with nonconformities.

B.1.7 For internal audit purposes it is possible to additionally use information from Russian national standard GOST R ISO 19011-2021, *Guidelines for auditing management systems*.

Annex C **(normative)**

Sustainable volume of timber harvesting

C.1 If the calculation of the sustainable volume of timber harvesting for clearcuts and successive felling is performed in such a way that it does not allow to decrease annual volume of timber harvesting for any year for a period not less than the established cutting age, such calculation ensures no decrease of the maximum possible volume of harvesting and constant supply of raw materials to timber processing enterprises in the long term.

C.2 In case of efficient forest management on the leased forest area, it is possible to ensure an increase in the productivity of forest plantations, an increase in the yield of more valuable species, and additional volumes of timber from tending felling. In such a situation, the use of methods for calculating sustainable timber harvesting (e.g., second age or integral calculated felling rate), assuming increase of the annual harvesting volume during the initial period over the calculated level of uniform forest use, which will be subsequently compensated by additional harvesting volumes as a result of improved efficiency of forest management, and will not lead to forest depletion.

C.3 If the area of mature and overmature stands under clearcuts and successive felling for a particular coniferous forest section exceeds the area corresponding to the normal distribution of age groups for that forest section, the justified use of calculation methods other than the uniform forest use method (e.g., use of second age or integral calculated felling rate) also ensures determination of sustainable timber harvesting under the following conditions.

C.4 The conditions for application of the second age and integral calculated felling rate formulas are effective forest regeneration of harvested areas and good quality tending of young trees, in accordance with B.4.1-B.4.4:

C.4.1 The management plan shall include a description of planned young growth maintenance activities, including:

- A description of the objective (establishment of economically valuable young trees) and target indicators for sites after performance of actions (species composition, density/stock, others, as appropriate) to assess achievement of the objective;
- criteria for selecting to perform cleaning felling actions for young trees;
- information on location and conditions of these sites;
- number and cleaning felling methods for each area, as well as due dates;
- the procedure for monitoring the results and description of corrective actions in case of failure to achieve the target indicators,

C.4.2 Annual Young Growth Tending (YGT) activities shall be carried out in areas requiring Young Growth Tending according to the criteria specified in Section 3 on an area of at least 5 % (where suitable areas are available, at least half of this area shall be clear-cut) of the average annual area of clear-cutting in the last five years or the average annual area converted to forest lands in the last five years (at the discretion of the Organization) in all leased areas within the scope of certification (or for an individual leased area, if the results of Young Growth Tending activities are consistent with such standards). On these sites, in forest areas for which intensive forest management model have been developed, the results of the YGT shall comply with such standards, and outside these forest areas, the results of the YGT shall result in the removal of the canopy of non-target species (which does not necessarily mean removal of all non-target tree species, but target species shall constitute at least half of the forest stand composition after tending) uniformly over the entire area of the site and thinning of the remaining dominant canopy to a density of no more than 1.5 thousand units per hectare.

C.4.3 The following stands are considered to be forest areas in need of YGT (the criteria specified in this section are minimum. The Organization may set other values that increase these areas for the purpose of determining areas in need of YGT):

- appropriate for the age of the YGT;
- there is a sufficient number of trees of the target species per 1 ha of the site for the purpose of harvesting (in accordance with the Forest Management Rules approved by Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 534);
- crown density of forest stands exceeds the minimum value to perform felling, stipulated for the corresponding young trees in the Forest Management Rules;
- remoteness of forest areas does not exceed 0.6 km from public roads during snow-free period.

It is allowed to carry out YGT, stipulated in section 2, on a smaller area in case there are no areas that need to carry out corresponding YGT. Absence of areas that need to implement the relevant YGT shall be confirmed by survey materials and/or forest inventory materials for potentially suitable areas converted to forested plantations and/or listed as young forests.

C.4.4 Achievement of target indicators in the areas specified in Section 2 shall be assessed based on the materials of the next taxation or based on the results of joint inspection of these areas by the Organization and representatives of the authorized executive bodies in the field of forest relations and information contained in the inspection act signed by both parties and/or in the act on changes to be added to in the State Forest Register.

C.5 In case of failure to comply with the above requirements to conduct YGT for two consecutive years, the use of estimated harvesting areas exceeding the estimated annual sustainable annual volume of timber harvesting, which does not allow for a decrease in this volume for any year during the calculation period, shall be terminated and shall not be allowed in the future.

C.6 In the event that the taxation materials for leased forest areas are more than 15 years old, the Organization shall, using the incremental approach, develop and justify a program for transition to the new taxation materials. The program shall include, at least:

- justification of the need to establish a period for transition, including description of objective reasons, i.e. reasons not related to the internal context of the Organization's activities;
- information provided by authorized public authorities regarding plans for forest inventory in the region;
- the duration of the period for transition, during which the organization shall fully bring taxation materials in respect of its leased areas. The duration of this period may not exceed 5 years and, in exceptional cases, 7 years. The period for transition is set once and cannot be extended for the same leased area;
- approximate schedule of taxation works and preparation of taxation materials and/or updating (actualization) of taxation materials with indication of a specific period for each leased site.

Work on new taxation materials shall begin no later than two years after the beginning of the transition period. In case the scope of the certificate includes several leased areas, the work on new taxation materials for the last leased forest area shall start no later than two years before the end of the transition period.

If for reasons beyond the control of the Organization, it is unable to make the transition to the new taxation materials, the Organization shall update its existing taxation materials and use them for the purposes of calculating the sustainable volume of timber harvest.

Annex D

(normative)

Justification of felling of dead and damaged plantations

D.1 At the planning stage of felling of dead and damaged stands (hereinafter referred to as sanitary felling), the organization shall:

D.1.1 After preparation of the Forest Pathology Research (FPR) act, the organization shall conduct a desk audit of the correctness of the report completion.

D.1.2 If the results of the audit reveal non-compliance of the FPR act with the regulatory requirements of the "Procedure for conducting forest pathology researches and the form of the forest pathology research act", "Rules for implementation of measures to prevent the spread of pests", or unreliable information provided in the FPR act, the organization shall demand from the FPR act preparation contractor to implement corrections and/or prepare a new FPR act.

D.2 At the stage of harvesting area allotment for sanitary harvesting the organization shall:

D.2.3 Verify that within the boundaries of the harvesting area the signs of damage to plantations and their sanitary (forest pathology) condition correspond to those specified in the FPR Act.

D.2.4 If during harvesting of the harvesting area the deviation of the actual condition of plantations from the data specified in the FRA act is revealed, exceeding the permissible error, it is necessary apply to the authorized authority of the constituent entity of the Russian Federation with a request to cancel this FPR act.

D.2.5 It is necessary to carry out photo-fixation of the stand condition prior to harvesting in accordance with the requirements of the Procedure for Forest Pathology Researches and the form of the Forest Pathology Research act approved by the Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 534.

Annex E

(normative)

Conservation areas and sites

E.1 Intact Forest Areas (IFAs)

E.1.1 Intact Forest Areas (IFAs) are natural landscapes of the forest zone of Russia minimally disturbed by human business activity. For the purposes of this standard, the IFAs include forest sites with an area of more than 50 thousand hectares and a minimum length of 10 km, which are in a natural state, on which no economic activity is carried out.

E.1.2 According to scientists-experts, who support designation and conservation of IFAs as an independent natural value, they fulfill a number of important functions, including:

- preservation of self-sustaining populations of animal and plant species particularly sensitive to anthropogenic impact, including preservation of viable species of large vertebrates;
- preservation of standard watersheds of streams, lakes, marshes and small rivers unaffected by economic activity;
- preservation of typical for specific landscapes set and spatial combination of ecosystems and habitat types;
- preservation of rare and unique ecosystems that have been destroyed or are rapidly disappearing in highly fragmented and heavily anthropogenically impacted landscapes.

E.1.2 IFAs can be formed by a mosaic of different ecosystems and include non-forest ecosystems. Natural pyrogenic (fire) dynamics may be present in MLTs. Also, such areas make a huge contribution to carbon sequestration.

In the scientific environment and among experts, there are no unified approaches and criteria regarding the conservation of IFAs and the value of their minimum area. Therefore, until the criteria for IFAs conservation are clarified and IFAs boundaries are updated within the framework of the NSFC requirements, those areas of IFAs that are presented on the map materials on the NSFC website are temporarily taken into account. In the future, the criteria for IFAs designation and their boundaries will be clarified.

The total area of IFAs in Russia is more than 246 million hectares, which is about 30 % of the total forest area in Russia. The following key characteristics of IFAs can be identified in terms of threats to their conservation.

E.1.2.1. Share of IFAs of the region area

IFAs due to natural and climatic peculiarities of different regions, are unevenly distributed. There are IFAs in 41 constituent entities of the Russian Federation. Their share of the area of these constituent entities is 16 %. In ten regions of Russia with the largest area of IFAs, their total area is more than 190 million hectares or 77.2 % of the total area of all IFAs in Russia.

Table E.1 – Share of IFAs of the region area

No.	Constituent entities of the RF	Area of IFAs, ha	Share of IFAs of the constituent entities' area, %
1	Krasnoyarsk territory	47 983 573	20,3
2	the Republic of Sakha (Yakutia)	31 228 657	10,1
3	Irkutsk region	18 772 296	24,2
4	Khanty-Mansiysk Autonomous District — Yugra	17 610 299	32,9
5	Kamchatka territory	15 692 443	33,8
6	Khabarovsk territory	14 760 532	18,7
7	the Komi Republic	12 379 800	29,7
8	the Republic of Buryatia	11 593 730	33,0
9	Zabaikalye territory	10 107 275	23,4
10	Yamalo-Nenets Autonomous District	10 074 916	13,1
	Total	190 203 520	19,1

This information suggests that in many regions where IFAs are represented, they cover a significant area and are therefore resilient to both natural and anthropogenic impacts without additional restriction and protection measures.

E.1.2.2. Economic attractiveness of IFAs

Vulnerability of IFAs is largely related to the possibility to carry out profitable economic activities on their territory. In this regard, an important factor is the economic accessibility of these areas, stand composition, and yield of business assortments. A significant part of the IFAs is represented by larch sparse forests, tundra and high-mountain forests and are unattractive from the economic point of view. At the same time, they occupy a significant area. Most of the IFAs are completely free of lease for timber harvesting. Thus, in three regions of the North-West of the European part of Russia (Arkhangelsk region, Komi Republic, Karelia Republic) the total area of IFAs completely free of forest lease for timber harvesting is 8,150,844 ha.

This information suggests that in many regions, where IFAs are represented, their involvement in economic activity is insignificant due to their inaccessibility or economic unattractiveness.

E.1.2.3. Sizes of IFAs

The larger the area of IFAs, the more sustainable it is. The closer the area of IFAs is to the critical 50 thousand ha, the higher the risk of its loss due to natural processes and economic activities. Distribution of IFAs by area is characterized by the data according to Table E.2:

Table E.2 – Sizes of IFA

Area of IFAs, thousand ha	Number of IFAs	Total area of all IFAs of this group, ha	Share of the group of total area of IFAs, %
up to 60	45	2 395 729	1,0
60 to 100	111	8 632 145	3,4
100 to 200	127	18 294 116	7,3
200 to 300	64	15 533 898	6,2
300 to 500	47	17 993 394	7,2
500 to 1 000	39	28 480 684	11,3
more than 1 000	52	160 315 998	63,7
Total	485	245645964	100,0

More than 75 % of all IFAs are IFAs the area of which exceeds 500 000 ha, this suggests that most IFAs are resilient.

E.1.2.4 Official conservation status of IFAs

Undisturbed, natural state of the ecosystem is an important characteristic of the natural value of an area and is of key importance when justifying creation of conservation areas. In some IFAs, a significant part of them is protected by the official status under the protection regime of the current Specially Protected Natural Reservations, which prohibits economic activities, including timber harvesting. Information on IFAs in the current Specially Protected Natural Reservations is summarized in Table E.3.

Table E.3 — IFAs in the current Specially Protected Natural Reservations

Constituent entity's name	IFA's area in the constituent entity, ha	Area of IFAs in the current SPNRs, ha	Share of IFAs the current SPNR, %
Pskov region	31 054	30 071	96,8
Krasnodar region	316 127	297 284	94,0
the Republic of Adygeya	100 207	93 026	92,8
Kirov region	16 613	12 655	76,2
Primorsk territory	2 069 338	1 372 524	66,3
Novgorod region	40 632	22 637	55,7
the Kabardino-Balkarian Republic	377 991	204 992	54,2
the Karachay-Cherkess Republic	453 969	222 562	49,0
Perm territory	823 291	353 550	42,9
the Chechen Republic	278 416	115 384	41,4
the Republic of Karelia	757 398	302 124	39,9
the Republic of Khakassia	1 321 619	525 730	39,8
Kemerovo region - Kuzbass	1 689 866	634 560	37,6
the Republic of Bashkortostan	304 779	109 885	36,1
the Republic of North Ossetia - Alania	249 601	84 794	34,0
the Republic of Sakha (Yakutia)	31 228 657	9 268 689	29,7
the Republic of Altai	3 262 600	963 184	29,5
Sakhalin region	845 288	238 317	28,2
the Komi Republic	12 379 800	3 408 728	27,5
Kamchatka region	15 692 443	4 292 601	27,4
Altai territory	377 243	95 399	25,3
the Republic of Dagestan	1 104 016	263 569	23,9
the Republic of Ingushetia	115 696	27 076	23,4
Arkhangelsk region	7 845 500	1 742 632	22,2
Murmansk region	4 301 862	830 255	19,3
Sverdlovsk region	844 201	150 500	17,8
the Republic of Buryatia	11 593 730	1 650 896	14,2
Amur region	4 154 902	463 513	11,2
Yamalo-Nenets Autonomous District	10 074 916	1 074 979	10,7
Zabaikalye territory	10 107 275	1 067 045	10,6
the Republic of Tyva	7 576 701	642 427	8,5
Khabarovsk territory	14 760 532	1 176 718	8,0
Irkutsk region	18 772 296	1 412 634	7,5
Novosibirsk region	2 455 507	168 729	6,9
Vologda region	96 179	6 215	6,5
Tomsk region	8 547 702	522 841	6,1
Khanty-Mansiysk Autonomous District – Yugra	17 610 299	1 066 477	6,1
Krasnoyarsk territory	47 983 573	1 557 861	3,2
Tymen region	3 026 023	88 751	2,9
Nenets Autonomous District	1 554 085	16 537	1,1
Omsk region	937 283	0	0,0

Total	246 079 210	36 578 351	14,9
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This information suggests that for a number of IFAs, their significant part is protected by the official conservation status of Specially Protected Natural Reservations.

E.1.3 It is therefore possible to establish risk criteria for the vulnerability of IFAs that depend on:

- the size of the IFA;
- proportion of IFAs with official conservation status;
- the degree of involvement of its territory in economic development.

It is necessary to establish thresholds of IFA vulnerability risk and divide all IFAs according to their vulnerability into three groups, particularly:

- IFAs with low risk;
- IFAs with potential risk;
- IFAs with high risk.

Measures to reduce the risk of vulnerability of IFA should be planned and applied at the level of the whole territory, because measures applied only on one leased forest area may not lead to reduction of vulnerability for IFAs and vice versa – management activities of a particular lessee may have no impact on the vulnerability of IFAs.

E.1.4 The following thresholds shall be applied in accordance with E.2.1-E.2.3 to classify an IFA into a particular risk group in NSFC:

E.1.4.1 Low risk:

The share of existing and planned SPNAs (established boundaries and preservation regime – prohibition of timber harvesting) is 30 % (lower boundary may vary within 25 – 35 % depending on the IFA specifics) and more of the area of IFAs.

The proportion of forest areas leased for timber harvesting purposes is 35 % and less of the area of IFAs (the upper limit may vary within 30 — 40 % depending on the IFA specifics).

The sum of the areas of existing or planned SPNAs (established boundaries and preservation regime – prohibition of timber harvesting) within IFAs and the area of IFAs free from lease for timber harvesting purposes is more than 50 000 ha.

There are no restrictions for this category of IFAs other than meeting the requirements of Annex D of this standard.

E.1.4.2 Potential risk (there is a possibility of increased risk of vulnerability of the IFA):

The share of existing and planned SPNAs (established boundaries and preservation regime – prohibition of timber harvesting) is less than 30 % of the area of IFAs (the upper limit may vary within 25 — 35% depending on the IFA specifics).

The share of forest areas leased for timber harvesting purposes is 35 % and less of the area of IFAs (the upper limit may vary within 30 — 40% depending on the IFA specifics).

The sum of the areas of existing or planned SPNAs (established boundaries and preservation regime – prohibition of timber harvesting) within IFAs and the area of IFAs free from lease for timber harvesting purposes is more than 50 000 ha.

For such IFAs, NSFC, in conjunction with the Organization and/or with other interested parties shall develop a documented plan to undertake work to identify the most valuable part of the IFAs for the purpose of designation. The area of such sites shall be at least 30 % of the area of IFAs. It is necessary to involve experts to carry out such works. The most valuable parts of the IFAs should be identified in such a way that the area of such a site together with already existing protected areas is no less than 50 000 ha, and its minimum length is at least 10 km. Once a documented plan for identification and conservation of the most valuable area has been prepared, it shall be signed by both parties. The organization, together with NSFC bodies may take measures to give the official status of protected areas to the allocated most valuable IFAs areas, including the status of SPNA. The organization should exclude such sites from its business use if they are located within the leased area.

Such most valuable parts of IFAs may also include areas that were previously designated as a result of interested parties' engagement and voluntarily excluded from economic use.

Once both parties have signed an agreement to commence development of the above plan of works, the Organization may conduct business activities on the remaining part of the IFA in accordance with the requirements for IFAs classified as low risk ones.

E.1.4.3 Identified risk is the risk assessment of the remaining IFAs. Prior to the commencement of economic activity, in order to mitigate the risk, the most valuable part of the IFAs should be identified in such a way that the area of such a site, together with existing protected areas, is at least 50 000 ha, and the minimum length is at least 10 km, and a moratorium on economic activity in this part of the IFA should be established. Also, in aggregate, the area of sites where no economic activity is conducted should be at least 30 % of the IFAs area. In the future actions should be undertaken on assignment of the official conservation status to these parts.

E.1.4.4 For particular IFAs located in several regions of Russian, different risk levels for different parts of these IFAs are defined depending on the region. If in a particular region, the proportion of IFAs in that region that is within the boundaries of existing and planned SPNAs is 30 % (the lower limit may vary within 25 – 35 % depending on the IFA specifics) and more of the area of IFAs in this region, and if the proportion of forest areas leased for timber harvesting in a given region is 35 % and less of the area of IFAs in this region (the upper limit may vary within 30 — 40 % depending on the IFA specifics), then a low risk may be established for the part of the IFA located in this region. The use of this approach is due to the fact that in a number of cases conservation planning of areas takes place at the regional level.

These IFAs are identified as a separate group in Table E.4

E.1.5 In accordance with the criteria described above, a risk analysis of the IFAs was performed to assign them to one of the three risk categories. The results are summarized in Table E.4.

Note – The values specified in Table E.4 in the column “Area of IFAs under lease (not in SPNAs), ha” may have insignificant deviations from the actual values due to errors in the information on the area of leased forest areas posted in open state information sources.

E.1.6 The IFA risk analysis and its results given in Table E.4 shall be regularly reviewed at least once a year. Once they have been duly approved by NSFC, the data in Table E.4 shall be updated. The basis for updating the results of the IFA risk analysis is the emergence of updated information on the IFA boundaries, changes in the economic activities within their boundaries, changes in the conservation status of parts of the IFA and other significant facts affecting the risk category.

Table E.4 – IFA risk categories for of Arkhangel'sk region, the Republic of Karelia, the Komi Republic, Perm territory, Krasnoyarsk territory, Irkutsk region

IFA No.	Region	Forestry section	District forestry section	Area of IFAs, ha	Area of IFAs in SPNRs, ha	Area of IFAs under lease (not in SPNRs), ha	Coordinates	
							X (WGS84)	Y (WGS84)
Low risk								
10-KR-455	the Republic of Karelia	Loukhskoe	Pyaozerskoe	331 322	102152	15 288	30,1028	66,4027
	Murmansk region							
10-KR-458	the Republic of Karelia	Kalevskoe	Voynitskoe	110 789	79 618	16 907	29,9697	65,0299
		Kostomukhskoe	Voknavolokskoe					
29-ARK-460	Arkhangelsk region	Onezhskoe	Nizhmozerskoe	399 007	119 642	90 895	37,3086	64,5623
		Severodvinskoe	Verkhneozerskoe					
29-ARK-463	Arkhangelsk region	Pinezhskoe	Keldinskoe	75 811	43 675	10 631	42,9866	64,4806
		Kholmogorskoe	Belogorskoe, Keldoizerskoe					
10-KR-465	the Republic of Karelia	Kostomukhskoe,	Ladvozerskoe, Kostomukhskoe	101 705	42 917	32 475	30,4559	64,3965
		Muezerskoe	Kimasozerskoe, Konets - Ostrovskoe					
11-KO-470	Arkhangelsk region	Vyjskoe	Ileshskoe	221 304	74 892	119 309	47,4087	62,2575
		Krasnoborskoe	Komarovskoe, Slobodskoe, Uftyugskoe					
		Yarenskoe	Lenskoe, Kozminskoe					
	the Komi Republic	Mezhdurechenskoe	Verkhne-Vashkinsk					
29-ARK-472	Arkhangelsk region	Onezhskoe	Kozhskoe, Nimengskoe, Onezhskoe, Chekuevskoe	68 321		58 174	38,0381	63,5068
29-ARK-475	the Republic of Karelia	Medvezhjegorskoe	Sergievscoe	852 604	585 222	154 123	37,2780	62,9151
		Onezhskoe	Kozhskoe, Maloshuyskoe, Nimengskoe, Prilukskoe, Unizhenskoe					
		Priozerno	Yangorskoe					
		Pudozhskoe	Vodlinskoe, Kubovskoe, Rimskoe, Yangozerskoe					
29-ARK-476	Arkhangelsk region	Bereznikovskoe,	Vaengskoe, Verkhnevaengskoe, Nizhnedvinskoe, Rochegodskoe	617 316	293 361	189 946	44,4407	63,1615
		Verkhnetoemskoe	Nizhnetoemskoe, Vershinskoe					
		Emetskoe,	Kovozerskoe, Chelmokhotskoe					
		Karpogorskoe,	Pachikhinskoe					
		Surskoe	Lavelskoe					

29-ARK-477	Arkhangelsk region	Arkhangelskoe Mezenskoe, Pinezhskoe, Kholmogorskoe	Pomorskoe Sovpolskoe, Kuloyskoe, Soyanskoe, Ruchjevskoe Keldinskoe Keldozerskoe	1 359 182	529 961	308 772	41,8447	65,4924
11-KO-153	the Komi Republic	Vuktylskoe, Pechorskoe	Vuktylskoe, Podcherskoe, Shugorskoe, Ust-Voyskoe Syninskoe, Kanenskoe	2 540 014	1 173 438	2 436	58,5584	64,4620
11-KO-446	the Komi Republic	Pechorskoe	Syninskoe	204 137	131 791	290	57,3480	65,6661
11-KO-447	the Komi Republic	Pechorskoe	Inta branch	125 234	62 409	0	57,3480	65,6661
11-KO-453	the Komi Republic	Vuktylskoe Pechoro-Ilychskoe Komsomolskoe	Vuktylskoe, Podcherskoe Eremeevskoe, Paljuskoe, Priuralskoe Komsomolskoe, Kurjinskoe	3 233 774	1 569 065	8 437	58,6723	62,1980
	Perm territory							
	Sverdlovsk region							
	Khanty-Mansiysk Autonomous District — Yugra							
11-KO-467	the Komi Republic	Meshchurskoe	Verkhnevymyskoe	155 395	53 533	0	51,9302	64,2756
29-ARK-469	the Komi Republic	Ertomskoe	Puchkomskoe Chuprovskoe	348 863	85 598	73 024	46,1869	63,8416
	Arkhangelsk region	Surskoe	Surskoe					
11-KO-471	the Komi Republic	Letskoe Priluzskoe Koygorodskoe	Letskoe Noshulskoe Kobrinakoe	75 784	67 087	3 769	50,1398	59,8156
	Kirov region							
11-KO-473	the Komi Republic	Mezhdurechenskoe	Verkhne - Vashkinskoe, Selogvozhskoe	193 767	58 144	84 196	47,1995	62,7084
	Arkhangelsk region	Vyjskoe	Ileshskoe, Gavrilovskoe					
24-KYA-200	Krasnoyarsk territory			65 344	25 965	0	87,1298	61,7109
24-KYA-22	Krasnoyarsk territory, the Republic of Tyva	Usinskoe	Verkhne-Usinskoe	55572	3 683	1950	93,1840	52,1092
24-KYA-221	Krasnoyarsk territory	Maganskoe Krasnoyarskoe	Beretskoe Ovsyanskoe	139330	119706	102	92,6993	55,6614
24-KYA-23	Krasnoyarsk territory, the Republic of Tyva	Ermakovskoe Usinskoe	Tanzybeyskoe, Bolsherechenskoe, Verkhne-Usinskoe, Aradanskoe,	664146	152198	27855	92,6553	52,4677
24-KYA-29	Krasnoyarsk territory the Republic of Tyva the Republic of Khakassia			1 411 803	527 279	0	91,0709	52,0973
17-TY-2	Krasnoyarsk territory, the Republic of Tyva	Verkhne-Kuzhebarskoe	Verkhne-Kuzhebarskoe	265 085	52 529	0	94,2503	52,7135
86-KHM-203	Krasnoyarsk territory			15 666 951	976 028	0	83,2945	62,0384

	Khanty-Mansiysk Autonomous District							
	Yamalo-Nenets Autonomous District							
59-PER-450	Perm territory			231 407	111 398	40 000	58,6180	59,9253
	Sverdlovsk region							
38-IRK-371	Irkutsk region			1036215	468544	1 371	108,2824	54,5360
	The Republic of Buryatia							
38-IRK-76	Irkutsk region	Sludyanskoe	Sludyanskoe	1476261	803839	49857	105,6559	59,7150
	The Republic of Buryatia							
14-SA-225	Irkutsk region			57186	0	0	112,4783	58,9764
	the Republic of Sakha (Yakutia)							
75-ZAB-236	Amur region			5816765	2061454	29769	117,8623	57,5674
	Zabaikalye territory							
	Irkutsk region	Bodaybinskoe	Bodaybinskoe					
	The Republic of Buryatia							
	the Republic of Sakha (Yakutia)							
Potential risk								
10-KR-485	the Republic of Karelia	Kemskoe	Pongomskoe	85 505	0	0		
29-ARK-457	Arkhangelsk region	Mezenskoe	Kuloyskoe, Mezenskoe, Sovpolskoe, Soyanskoe	168 585	0	0	43,9716	65,6437
29-ARK-461	Arkhangelsk region	Leshukonskoe	Olemskoe, Ust-Vashskoe	692 801		196 325	44,7232	64,9258
		Mezenskoe	Mezenskoe, Sovpolskoe, Soyanskoe					
		Pinezhskoe	Ezhugskoe, Kuloyskoe, Pinezhskoe					
29-ARK-474	Arkhangelsk region	Leshukonskoe	Leshukonskoe, Ust-Vashskoe, Vozhgorskoe, Koynasskoe	5 629 487	140 450	570710	48,2850	65,5960
		Mezenskoe	Mezenskoe					
	the Komi Republic	Ust-Tsilemskoe	Byraevskoe, Ust-Tsilemskoe					
	Nenets Autonomous District							
11-KO-484	the Komi Republic	Ust-Tsilemskoe	Ust-Tsilemskoe	133 782	15 039	45 744	50,0495	65,0714
	Arkhangelsk region	Leshukonskoe	Vozhgorskoe					
11-KO-442	the Komi Republic	Usinskoe	Usinskoe	248 792	125	26 654	58,9264	66,6490
		Pechorskoe	Inta branch					
11-KO-443	the Komi Republic	Pechorskoe	Inta branch	209 798	844	0	60,8620	66,7763
11-KO-444	the Komi Republic	Pechorskoe	Syninskoe, Inta branch	531 295	22 842	11 686	58,9300	66,0314
		Usinskoe	Usinskoe					
11-KO-445	the Komi Republic	Pechorskoe	Inta branch	408 823	36	6 994	61,4166	66,0194
11-KO-456	the Komi Republic	Kadzheromskoe	Berezovskoe	511 001	0	2 366	55,5422	65,9091
		Pechorskoe	Levoberezhnoe					
		Usinskoe	Ust-Usinskoe					
11-KO-468	the Komi Republic	Vuktylskoe	Lemtskoe	146 497	0	0	56,8482	64,2620

11-KO-478	the Komi Republic	Izhemskoe	Izhemskoe	466 921	0	2 773	54,9151	65,3125
		Kadzheromskoe	Berezovskoe					
11-KO-480	the Komi Republic	Ust-Tsilemskoe	Pizhemskoe	275 798	3 491	0	51,1324	65,1673
11-KO-481	the Komi Republic	Ust-Tsilemskoe	Pizhemskoe	403 390	54 366	0	51,8803	64,8327
11-KO-482	the Komi Republic	Kedvinskoe	Ukhtinskoe	72 497	19 248	0	52,7467	64,0019
11-KO-483	the Komi Republic	Ust-Tsilemskoe	Ust-Tsilemskoe	981 537	3 807	207 171	53,9264	65,7947
24-KYA-167	Krasnoyarsk territory	Severo-Eniseyskoe	Erudo-Pitskoe	219 415	0	5 658	95,3410	60,0358
24-KYA-168	Krasnoyarsk territory			386 831	0	0	95,4885	61,0962
24-KYA-169	Krasnoyarsk territory	Severo-Eniseyskoe	Severo-Eniseyskoe	150568	0	778	94,6744	60,6682
24-KYA-173	Krasnoyarsk territory	Eniseyskoe	Eniseyskoe, Losinoborskoe, Nazimovskoe	88 236	0	5 892	89,3694	58,8819
24-KYA-176	Krasnoyarsk territory	Eniseyskoe	Yuzhno- Eniseyskoe	103 268	14 679	30 930	93,2982	58,6557
		Motyginskoe	Yuzhno- Eniseyskoe, Kulakovskoe					
		Severo-Eniseyskoe	Bryankovskoe, Sukho-Pitskoe					
24-KYA-177	Krasnoyarsk territory			246 194	0	0	92,1981	61,5218
24-KYA-178	Krasnoyarsk territory	Borskoe	Vorogovskoe	264 907	0	2924	90,5133	60,6825
		Nizhne- Eniseyskoe	Zotinskoe					
24-KYA-179	Krasnoyarsk territory	Severo-Eniseyskoe	Novokalaminskoe	749 598	0	6699	91,3471	60,0685
		Nizhne- Eniseyskoe	Zotinskoe					
24-KYA-18	Krasnoyarsk territory	Usinskoe	Aradanskoe	271 331	39198	15468	93,8303	53,0528
		Karatuzskoe	Verkhne-Kuzhebarskoe, Chervizyulskoe					
24-KYA-18	Krasnoyarsk territory			489 337	0	0	92,2093	59,3143
24-KYA-181	Krasnoyarsk territory			91 074	0	0	93,6596	61,1032
24-KYA-182	Krasnoyarsk territory			380 290	0	0	93,7611	61,5042
24-KYA-184	Krasnoyarsk territory	Vorogovskoe	Vorogovskoe	263 999	0	151	90,5194	61,4622
24-KYA-185	Krasnoyarsk territory			99 018	8 338	0	91,0896	61,8634
24-KYA-186	Krasnoyarsk territory			191 650	0	0	92,4686	64,5725
24-KYA-187	Krasnoyarsk territory			1 004 775	1 083	0	88,5811	66,2720
24-KYA-188	Krasnoyarsk territory			101123	0	0	90,6290	64,9332
24-KYA-189	Krasnoyarsk territory			60 861	0	0	98,5830	63,1036
24-KYA-190	Krasnoyarsk territory			109 431	0	0	97,0056	61,9777
24-KYA-191	Krasnoyarsk territory			1 004 506	0	0	85,8297	66,5276
24-KYA-201	Krasnoyarsk territory	Borskoe	Borskoe	862 682	78 558	19752	87,8055	62,1948
24-KYA-204	Krasnoyarsk territory			85510	0	0	100,7658	60,9169
24-KYA-205	Krasnoyarsk territory	Motyginskoe	Ordzhonikidzevskoe	73 673	0	13271	95,6847	58,1097
		Chunskoe	Takuchetskoe					
24-KYA-210	Krasnoyarsk territory	Baykitskoe	Osharovskoe	298034	0		100,4355	59,9203
		Kodinskoe	Tsembinskoe					
		Khrebtovskoe	Yarkinskoe					
24-KYA-216	Krasnoyarsk territory	Daurskoe	Tubilskoe, Kurtyulskoe	184855	8 234	33235	93,0503	54,6154
		Idrinskoe	Ekaterininskoe, Kozinskoe					
		Kizirskoe	Verkhne-Sisimskoe					

		Manskoe	Krolskoe, Kolbinskoe					
24-KYA-243	Krasnoyarsk territory	Tungussko_ Chunskoe	Vanavarskoe, Chemdalskoe	73891	0	21234	102,6176	60,3308
24-KYA-338	Krasnoyarsk territory			118679	0	0	105,7399	62,6640
24-KYA-339	Krasnoyarsk territory			494111	0	0	105,0952	62,1705
24-KYA-340	Krasnoyarsk territory			187910	0	0	103,8394	62,7005
24-KYA-341	Krasnoyarsk territory			85333	0	0	104,5546	63,4077
24-KYA-342	Krasnoyarsk territory			915948	0	0	104,0380	65,7778
24-KYA-366	Irkutsk region	Nizhneudinskoe	Tofalarskoe, Kamenskoe	9330142	436 046	370 313	95,1267	53,8367
		Tulunskoe	Prisayanskoe, Ikeyscoe					
	Krasnoyarsk territory	Verkhnemanskoe	Verkhnemanskoe					
		Irbeykoe	Kungusskoe					
		Karatuzskoe	Nizhne-Kuryatskoe					
		Kizirskoe	Koshurnikovskoe					
		Kuraginskoe	Tabratskoe, Kazyrskoe					
		Sayanskoe	Kan-Oklerskoe					
	the Republic of Buryatia							
	the Republic of Tyva							
24-KYA-386	Krasnoyarsk territory	Baykitskoe	Osharovskoe	577636	0	137967	99,7992	62,3601
24-KYA-387	Krasnoyarsk territory	Baykitskoe	Osharovskoe	14 865 300	437 460	375 760	91,5412	63,2428
24-KYA-388	Krasnoyarsk territory			99 780	578	0	100,7639	60,3861
24-KYA-389	Krasnoyarsk territory			1 932 934	1 527	0	102,2773	61,4730
	Irkutsk region							
24-KYA-390	Irkutsk region			11 665 225	273 244	0	105,6332	64,1251
	Krasnoyarsk territory							
	the Republic of Sakha (Yakutia)							
17-TY-24	Krasnoyarsk territory	Usinskoe	Verkhne-Usinskoe	144 448	17 327	11 070	93,0120	51,8503
	the Republic of Tyva							
70-TOM-170	Krasnoyarsk territory	Eniseyskoe	Losinoborskoe	120 700	0	5 035	87,6819	58,3053
	Tomsk region							
70-TOM-171	Krasnoyarsk territory	Eniseyskoe	Losinoborskoe	243 659	61 795	17 295	88,3998	58,9267
		Nizhne- Eniseyskoe	Kasovskoe					
	Tomsk region							
70-TOM-202	Krasnoyarsk territory	Zotinskoe	Zotinskoe, Mayskoe, Symskoe	4 564 920	61 795	42 071	85,0788	59,7410
	Tomsk region							
38-IRK-217	Irkutsk region	Nizhneudinskoe	Kamenskoe	103116	0	5017	98,4982	54,6045
38-IRK-217	Irkutsk region	Tayshetskoe	Verkhne-Biryusinskoe, Tagulskoe	336588	0	5484	97,0797	55,0074
38-IRK-223	Irkutsk region	Zhigalovskoe	Tuturskoe	159744	0	27029	105,9272	54,5400
		Kachugskoe	Anginskoe, Verkholskoe					

38-IRK-224	Irkutsk region			215854	0	0	113,2972	57,6378
38-IRK-227	Irkutsk region			979270	0	0	113,7533	58,8838
	the Republic of Sakha (Yakutia)							
38-IRK-228	Irkutsk region			756454	0	0	115,9206	59,0819
38-IRK-229	Irkutsk region	Bodaybinskoe	Bodaybinskoe	63443	0	8836	115,7765	58,5874
38-IRK-230	Irkutsk region	Bodaybinskoe	Bodaybinskoe	51791	0	0	116,3762	58,6903
38-IRK-231	Irkutsk region			265711	0	0	114,7278	57,4470
38-IRK-233	Irkutsk region			224903	0	0	118,8236	58,7565
	the Republic of Sakha (Yakutia)							
38-IRK-234	Irkutsk region			75098	0	0	117,5303	59,1017
38-IRK-242	Irkutsk region	Katangskoe	Katangskoe	75345	0	20996	107,1627	59,2920
38-IRK-246	Irkutsk region	Katangskoe	Katangskoe	75616	0	13315	109,3805	58,9659
		Kirenskoe	Icherskoe					
38-IRK-249	Irkutsk region			1641552	0	377	113,2663	56,8176
	the Republic of Buryatia							
38-IRK-251	Irkutsk region	Kazachinsko-Lenskoe	Kazachinskoe	5561047	230115	731656	108,1746	58,7886
		Kirenskoe	Chayskoe, Kirenskoe, Icherskoe					
		Mamskoe	Mamskoe					
	the Republic of Buryatia							
38-IRK-252	Irkutsk region	Katangskoe	Katangskoe	145204	0	0	108,4443	60,2851
38-IRK-335	Irkutsk region			121464	0	0	108,0146	62,7277
38-IRK-336	Irkutsk region			242624	0	0	107,8764	62,0711
38-IRK-343	Irkutsk region			320096	0	0	105,3228	61,4409
	Krasnoyarsk territory							
38-IRK-361	Irkutsk region			56946	0	0	106,8734	63,1468
38-IRK-392	Irkutsk region			193749	0	0	108,2659	60,7636
38-IRK-393	Irkutsk region			66630	0	0	109,2721	60,6733
38-IRK-415	Irkutsk region	Katangskoe	Katangskoe	1171077	0	94963	105,6559	59,7150
	Krasnoyarsk territory	Tungussko_Chunskoe	Chemdalskoe					
3-BU-365	Irkutsk region	Zalarinskoe	Cheremshanskoe	1241063	6040	13910	102,2480	52,2076
		Sludyanskoe	Sludyanskoe					
		Usolskoe	Toysukovskoe					
		Cheremkhovskoe	Malo-Belskoe, Golumetskoe					
	the Republic of Buryatia							
Identified risk								
29-ARK-464	Arkhangelsk region	Karpogorskoe	Karpogorskoe	143 430	323	136 579	43,5753	64,2668
		Pinezhskoe	Pinezhskoe					
		Kholmogorskoe	Kuzomenskoe					
29-ARK-466	Arkhangelsk region	Onezhskoe	Karamenskoe, Nizhmozerskoe	163 683	0	100 360	39,0416	64,2729
		Severodvinskoe	Belozerskoe, Unskoe					

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11-KO-441	the Komi Republic	Usinskoe	Mutno-Materiksk, Ust-Usinskoe, Usinskoe	429 953	24 109	321 191	55,9254	66,6530
11-KO-459	the Komi Republic			52 383	0	0	53,1976	64,9260
24-KYA-172	Krasnoyarsk territory	Eniseyskoe	Nazimovskoe	63 345	13 368	24 408	89,5499	59,1608
24-KYA-175	Krasnoyarsk territory	Severo-Eniseyskoe	Bryankovskoe	56 607	0	2 021	93,1486	59,1047
24-KYA-183	Krasnoyarsk territory	Baykitskoe	Osharovskoe, Baykitskoe	295 947	0	122 330	97,4846	61,4804
24-KYA-206	Krasnoyarsk territory			50041	0	0	100,5790	60,5020
24-KYA-207	Krasnoyarsk territory	Baykitskoe	Osharovskoe	107864		107864	97,9333	60,0596
24-KYA-208	Krasnoyarsk territory	Baykitskoe	Osharovskoe	174351	0	98261	100,2469	60,6864
24-KYA-209	Krasnoyarsk territory	Baykitskoe	Osharovskoe	199832	0	199257	98,3503	60,5634
24-KYA-211	Krasnoyarsk territory	Teryanskoe	Verkhneteryanskoe, Кажимское	149399	47223	99340	96,0904	59,3389
24-KYA-212	Krasnoyarsk territory	Baykitskoe	Osharovskoe	73423	0	73423	98,4239	60,1559
24-KYA-213	Krasnoyarsk territory	Teryanskoe	Verkhneteryanskoe	129550	0	83441	96,7057	59,4564
24-KYA-247	Krasnoyarsk territory	Kodinskoe	Panovskoe	64090	0	54246	102,4440	59,7941
		Tungusko_Chunskoe	Chemdalskoe					
24-KYA-391	Krasnoyarsk territory	Kodinskoe	Laushkardinskoe, Tsembinskoe, Chemdalskoe, Chikogdinskoe	183899	0	157 569	101,3003	59,5918
59-PER-449	Perm territory			61323	13 946	0	59,3753	60,7592
	Sverdlovsk region							
38-IRK-222	Irkutsk region	Mamskoe	Mamskoe	138691	0	74427	111,1979	59,1994
		Kirenskoe	Icherskoe					
	the Republic of Sakha (Yakutia)							
38-IRK-235	Irkutsk region	Bodaybinskoe	Bodaybinskoe	52865	0	7014	117,3148	58,8102
38-IRK-240	Irkutsk region	Katangskoe	Katangskoe	60219	0	43815	106,3219	58,6194
		Ust-Kutskoe	Verkhne-Nepskoe					
38-IRK-241	Irkutsk region	Kirenskoe	Kirenskoe	90962	0	77670	108,1233	58,1852
38-IRK-244	Irkutsk region	Severnoe	Sosnovskoe, Tubinskoe	51634	0	9621	104,3816	58,1774
		Ust-Kutskoe	Verkhne-Nepskoe					
38-IRK-250	Irkutsk region	Katangskoe	Katangskoe	381835	0	307011	108,1746	58,7886
		Kirenskoe	Kirenskoe, Chayskoe					
38-IRK-32	Irkutsk region	Sludyanskoe	Sludyanskoe	49049	5349	17050	103,0829	51,9722

		Usolskoe	Toysukovskoe					
		Shelekhovskoe	Shelekhovskoe					
Mixed risk								
29-ARK-462				696 366	99 927	382 039	47,3838	64,4001
29-ARK-462 — identified risk	Arkhangelsk region	Leshukonskoe	Vozhgorskoe, Koynasskoe, Leshukonskoe, Olemskoe, Ust-Vayskoe	362 462	0	216 055	Identified risk	
29-ARK-462 — low risk	the Komi Republic	Ertomskoe	Vazhgorskoe, Ertomskoe, Chimskoe, Chuprovscoe	333 904	99 927	165 984	Low risk	
		Udorskoe	Pysskoe					
11-KO-479				1 242 836	284 483	999 915	50,1334	64,3659
11-KO-479 — low risk	the Komi Republic	Meshchurskoe	Verkhnevyskoe	767 139	283051	124182	Low risk	
			Meshchurskoe					
		Udorskoe	Verkhnevezenskoe					
			Pysskoe					
		Ust-Tsilemskoe	Pizhemskoe					
		Zheleznodorozhnoe	Chinjavyrykskoe					
11-KO-479 — identified risk	Arkhangelsk region	Leshukonskoe	Vozhgorskoe, Koynasskoe	475 697	2 076	459 913	Identified risk	

E.2 Wetlands (WLs)

The list of 35 wetlands (Ramsar) of international importance was approved by the Russian Government Decree No. 1050 of 13.09.1994 [8]. The information about wetlands of international importance is given in the publication "Russian Wetlands of International Importance" (2012), on the website "Wetlands of Russia" [9] and on the website of NSFC [7].

An approximate procedure for developing measures to conserve the natural values of wetland:

- It is necessary to analyze protection of wetlands by different types of protected areas – Specially Protected Natural Reservations, protective forests, Special Protected Forest Areas, etc. It is necessary to determine on which of them harvesting shall be prohibited.
- For the rest of the wetlands the necessary conservation measures can be found in the above-mentioned sources. In case the measures for conservation of natural values are not described, described in insufficient details and obscurely, or the organization considers it advisable to apply other measures, consultations with interested parties (scientific organizations, higher education institutions of the specified regions) should be held. If necessary, experts may be involved.

Conservation measures may include various restrictions, including prohibition of economic activities.

E.3 Important Bird Areas of the Russian Federation (IBAs)

The concept of identification of important bird areas was developed by Birdlife International. Information about all important bird areas is available on the website of this organization [10]. Important bird areas include:

- habitats of a significant number of species of one or more globally threatened or globally endangered species or those likely to fall into this category;
- habitats of rare and endangered species included in the IUCN Red List, the Red Book of the Russian Federation;
- habitats of a significant number of endemic species;
- habitats of a significant number of species the distribution of which is limited by a single biome (e.g., taiga);
- places of formation of large nesting, wintering, moulting and migratory bird aggregations.

Thus, the natural values of IBAs are the above bird habitats (hereinafter – important bird areas).

In Russia, identification of important bird areas was carried out within the framework of the Russian Bird Conservation Union (RBCU) program. Information about IBAs is available on the website of the Russian Birds Conservation Union [11] and on the website of NSFC [7], in the publications "Important Bird Areas of Russia", 2000, 2006, 2009.

An approximate procedure for development of measures for conservation of natural values of IBAs:

- It is necessary to analyze the protection of IBAs by various types of conservation areas: SPNR, protection forests, SPFA, etc. It is necessary to determine on which of them harvesting is prohibited.
- In the rest of the IBAs, it is necessary to identify existing important bird areas and take measures to conserve them.

Different methods can be used to identify existing important bird areas and determine measures for their conservation: inquiries to executive authorities, conservation and scientific organizations, consultations with their representatives, experts in the field of ornithology, analysis of publications, field surveys or others. Identification may occur gradually, not simultaneously on the entire territory, but only in those areas where economic activities are planned, including forestry operations and road construction.

Conservation measures may include various restrictions on economic activities (e.g. seasonal restrictions on places where migratory bird species stop to feed), including prohibition of economic activities.

BOX

Measures to conserve natural values of the IBAs may vary and depend on the bird species and habitats the IBA is designated for.

*Example 1. The IBA of European Russia **Kargopolskaya sush – zhuravliniy kray** (Kargopol Dryland – Crane Land) (AP-001, EU-RU027).*

It is designated in the Kargopol district of the Arkhangelsk region as a place of significant concentrations of migrating birds (mainly geese), as well as crane nesting sites and mass gathering of cranes in autumn. Habitats are wetlands and agricultural lands, meadows, forest areas.

Main threats: reduction of agricultural areas (replacement of grain crops with meadows); poaching; disturbance factor.

Necessary protection measures: restoration of agricultural land use².

In this case cuttings are not a threat. Temporary seasonal restrictions on economic activities in areas where birds congregate should be established. Also, a buffer zone should be allocated near swamps with nesting grounds of cranes for the nesting and breeding period where restrictions on economic activities should be imposed. More specific measures, including width of buffer zones, types of restrictions on economic activities, and the duration of the restrictions should be determined with experts in the field of ornithology.

*Example 2. The IBA of European Russia **Vodlozero** (KA-007, EU-RU028)*

Identified in the Republic of Karelia and Arkhangelsk region in the basin of Lake Vodlozero and the Ileksa River as mass nesting sites for waterfowl, stopover sites for feeding birds on migration, as a place of large nesting aggregation of rare birds of prey (osprey, white-tailed eagle, golden eagle). Habitats are represented mainly by wetlands and forests.

Main threats: forest harvesting, development of the area infrastructure, afforestation of the area, spring hunting, poaching, recreational impact, disturbance factor.

Necessary protection measures: inspection of the area and creation of a regional SPNA or inclusion of the area of IBAs going beyond its boundaries in the conservation zone of Vodlozero Park.

In this case cuttings are a threat as the IBA contains nesting sites for large birds of prey. These species nest in large trees. It should be noted that nesting sites can be located both in sparse forests near bogs and in the forest massif. According to the Red Data Book of the Russian Federation (2021), a buffer zone up to 500 m wide is required for the conservation of nesting sites of large birds of prey. Therefore, when developing measures to conserve the natural values of this IBA, in addition to seasonal restrictions on economic activities to conserve nesting sites for waterfowl and feeding grounds for migratory birds, it is necessary to identify nesting sites of large birds of prey, define the boundaries of buffer zones and the regime of restrictions.

More specific measures, including width of buffer zones, types of management restrictions, duration of restrictions should be determined with the involvement of experts in the field of ornithology.

² The description of the IBA *Kargopolskaya sush – zhuravliniy kray* and the IBA *Vodlozero* is taken from the website of the Russian Birds Conservation Union.

E.4 Rare ecosystems

Rare ecosystems are ecosystems that occupy a small area at the level of a country or a specific region. The reasons for rarity can be either natural-historical or anthropogenic. As such, rare ecosystems are vulnerable and may be lost as a result of business activities.

Lists of rare ecosystems at the regional level have been developed for three constituent entities of the Russian Federation: Arkhangelsk region, Kirov region, Perm territory and are given in Tables E5 – E7. The list of rare ecosystems identified at the national level (Table E8) is used for the remaining constituent entities of the Russian Federation.

The regime of protection and use for rare ecosystems of the Arkhangelsk region and Kirov region is given in Tables E5, E6.

The regime of preservation and use for rare ecosystems of Perm territory and rare ecosystems identified at the national level is prohibition of economic activity.

For all types of rare ecosystems in all regions it is possible to cut down dead and damaged forest stands, clear forests from littering, pollution and other negative impacts, cut down during measures to eliminate an emergency situation in forests resulting from forest fires.

Table E5 – Rare ecosystems of Arkhangelsk region

Rare Ecosystem Type	Criteria of Allocation	Regime of Preservation and Use
Forests with Siberian fir	Presence of Siberian fir at least 3 pieces in the stand. Age from 120 years.	Prohibition of business activities ³ Strict conservation regime is established due to weak recovery capacity of Siberian fir, low competitiveness in comparison with other coniferous and hardwood species, low chances of fir trees reaching the first tier.
Forests with European black alder	Presence of black alder at least 3 pieces in the stand. Age from 60 years.	Prohibition of business activities. Strict conservation regime is established due to high vulnerability of forests with black alder to mechanical impacts. Plots with small areas of black alder trees are identified as key habitats. In areas where black alder trees are present in small numbers – occurring sporadically, such trees are preserved outside the technological network as single objects of biodiversity.
Forests with larch	Presence of larch at least 3 pieces in the stand (for Mezensky and Leshukonsky districts – at least 5 units). Ripening, mature and overmature stands.	Prohibition of business activities. Road construction is possible if there are no other options for road construction, or if other options would result in more significant negative impacts. This should take into account the area of the cut, its configuration and the extent to which larch trees are affected by harvesting. Felling may be carried out for scientific purposes to find the optimal management regime to ensure successful regeneration of larch, its retention in the stand and other natural values associated with the presence of larch in the stand. When planning economic activities (road construction, felling for scientific purposes) it is

³ For all types of rare ecosystems in all regions it is possible to cut down dead and damaged forest stands, clear forests from littering, pollution and other negative impact, cut down during measures to eliminate an emergency situation in forests resulting from forest fires.

		necessary to involve experts.
Forests with small-leaved linden	Presence of linden in the stand or undergrowth. Occurs mainly in the valleys of large rivers: the Severnaya Dvina, the Vaga, the Onega, most of the areas where this species is found do not belong to the forest lands. It grows less frequently in the valleys of tributaries of these large rivers or on inter-river uplands. They were found in the following forest districts: - Konoshskoe (valley of the Voloshka river); - Pravodvinskoe (valley of the Lakhoma river); - Cherevnikovskoe (valley of the Demkina river); - Bereznikovskoe (natural boundary of Lipovets); - Velskoe (valley of the Kolenga river, the Kuloy river, Velsk city suburbs); - Kotlasskoe (valley of the Nyuba river); - Yarenskoe.	Prohibition of business activities. Strict preservation regime is established due to the rarity of the species and the importance of preserving the existing microclimatic conditions within the linden population loci.
Forests with elm trees	Presence of elm in the stand or in the undergrowth. Found in the following forestry sections: - Priozernoe (Samkovskoe forestry section, quarter 58, unit 2), total about 100 pcs; - Nyandomskoe (near Lelma railway station, Shozhenskoe forestry section (quarter 7, unit 10, 16, 17, 22, 23, quarter 8, unit 2, 3), total about 160 pcs.	Prohibition of business activities. Strict preservation regime is established due to high vulnerability of the existing elm populations and their extremely low capacity for self-recovery.
Lichen pine forests	The predominant species is pine. Forest type is lichen pine forest. Age is from 80 years.	Prohibition of business activities. Strict preservation regime is established due to high vulnerability of lichen pine forests to mechanical impacts and critical importance as a habitat of reindeers.
Forests on rock outcrops	Forest type is rock forest. Rock forest types are identified in the following forestry sections: - Obozerskoe (Turchasovskoe district forestry sections); - Onezhskoe (Maloshuyskoe district forestry sections); - Solovetskoe; - Vodlozersky national park (Ilekskoe district forestry sections). Forest inventory of Onega, Plesetsk, Leshukonsky and Mezensky districts was carried out by different forest inventory organizations. Not all forest management organizations identified rock forest types during the forest inventory, so not all areas with rock forest types can be identified by taxation descriptions. Rock forest communities can be found in the following forestry sections: - Onezhskoe (Unezhenskoe, Nimenskoe, Kozhskoe district forestry sections); - Priozernoe (Yangorskoe, Undozerskoe district forestry section); - Leshukonskoe (Vozhgorskoe district forestry section); - Mezenskoe (Moseevskoe district	Prohibition of business activities, except for: felling of dead and damaged forest stands, clearing of forests from littering, pollution and other negative impact, felling during measures to eliminate an emergency situation in forests resulting from forest fires. Strict preservation regime is established due to high vulnerability of rock forest types to mechanical impacts and weak regenerative capacity of forest plantations.

	forestry section); - Plesetskoe (Oksovskoe district forestry section (Myandukha mountain); - Vodlozersky national park (Ilekskoe and Pudozhskoe district forestry sections).	
Forests of the largest karst-glacial valleys in Arkhangelsk region (karst ravines)	The largest karst ravines with a length of more than 15 km and forests along the sides and slopes of these ravines include: - Stepanov Dol (Arkhangelsk forestry section); - Stugan (Arkhangelsk forestry section); - Lukov (Mezenskoe forestry section); - Poltinsky (Pinezhsk forestry section). Location of rare ecosystems of this type is shown in cartographic documents.	Prohibition of business activities. Strict preservation regime is established due to high vulnerability of the conservation objects.
Forests in the largest shelopnyak fields of Arkhangelsk region	The largest shelopnyak fields include: - Mayda area (Mezenskoe forestry section); - Padozersky site (Kholmogorskoe forestry section). Location of rare ecosystems of this type is shown in cartographic documents.	Prohibition of business activities. Strict preservation regime is established due to high vulnerability of the conservation objects.
Forests included in major swamp systems of Arkhangelsk region	In Arkhangelsk region the largest swamp systems with high vulnerability to business activities and complexity of restoration of forest areas are classified as: - forest areas within Patboloto swamp system (Leshukonsky districts, Leshukonskoe forestry section); - forest area within Mikhalevo swamp system (Krasnoborsky district, Krasnoborskoe and Verkhnetoemskoe forestry sections); - forest areas within Veliky Mokh swamp system (Nyandomsky and Plesetsky districts, Plesetskoe, Priozernoe and Nyandomskoe district forestry sections); - forest areas within Dolgaya Chist swamp system (Kargopolsky district, Konoshskoe and Kargopolskoe district forestry sections). Rare ecosystems include forest areas within the largest swamp systems that meet the following criteria: - occupy karst and/or ancient water-glacial landforms, on elevated areas of beds, forming large forest islands and headlands; - cover peat ridges in areas of dystrophic ridge-lake or aapa complexes; - frame river and stream heads which are fed by the swamp system; - formed on peat strata self-drained as a result of karst and tectonic processes; - located in places of discharge and near-surface occurrence of groundwater rich in mineral nutrition elements; - represent forest areas unaffected by cutting operations around swamp systems fully surrounded by young secondary forests and clearcuts. Location of rare ecosystems of this type is shown in cartographic documents.	Complete prohibition of economic activity is required in areas with a reserve of less than 80 m³/ha. Strict preservation regime is established due to high vulnerability of such forests. In units with reserves of 80 m³/ha and more, felling is allowed with removal of no more than 30 % of timber reserves (taking into account the rise in the ground-water level after felling and noticeable changes in snow accumulation, temperature and soil freezing). Felling frequency should be no more than once in 30 years (taking into account weak seed production, low seed germination, unsatisfactory conditions for seed regeneration, low number of undergrowth and unfavorable conditions of stand development in such forests).

Table E6 – Rare ecosystems of Kirov region

Rare Ecosystem Type	Criteria of Allocation	Regime of Preservation and Use
Fir and spruce forests	Presence of fir at least 4 pieces in the stand. The age of the plantation is more than 120 years. Forest type is fern, linden, grass-marsh, sagebrush. The density of the forest stand is not more than 0.6.	Prohibition of business activities. Strict preservation regime is established due to the reduction of the area under the action of destructive factors of forests typical for this region in the past.
Sphagnum pine forests	The predominant species is pine. The age of the plantation is more than 140 years. The forest type is sphagnum.	Prohibition of business activities. Strict preservation regime is established due to reduction of the growing area under the action of destructive factors. It is possible to build roads in winter. When planning road construction, it is necessary to involve an expert botanist.
Lichen pine forests	The predominant species is pine. The age of the plantation is more than 80 years. The forest type is lichen forest.	Prohibition of clear-cutting. Selective cuttings are possible with density up to 0.4-0.5 in order to maintain the existence of pine trees, rare and vulnerable species of grasses that can grow in such communities.
Ericetal pine forest	The predominant species is pine. The age of the plantation is more than 80 years. The forest type is ericaceous.	Prohibition of clear-cutting. Selective felling is allowed.
Larch forests	Presence of larch at least 4 pieces in the stand. The age of larch in the stand is more than 160 years.	Prohibition of clear-cutting. Selective felling with preservation of larch trees outside the technological network is allowed.
Forests with oaks	Presence of at least 4 oak trees in the stand. The age of the plantation is more than 80 years.	Prohibition of clear-cutting. Selective felling with preservation of broad-leaved trees outside the technological network is allowed.
Forests with linden (in subzones of middle and southern taiga)	Presence of at least 4 linden trees in the stand. The age of the plantation is more than 70 years.	Prohibition of clear-cutting. Selective felling with preservation of broad-leaved trees outside the technological network is allowed.
Multi-species broad-leaved forests (in subzones of middle and southern taiga)	Presence of at least 3 broad-leaved species in the plantation, which together constitute at least 3 trees in the stand. The age of the plantation is more than 70 years.	Prohibition of clear-cutting. Selective felling with preservation of broad-leaved trees outside the technological network is allowed.
Old-aged aspen forests	Presence of aspen at least 5 trees in the stand. The age of the plantation is more than 80 years. Type of forest is ferny, linden, mixed herbaceous.	Prohibition of clear-cutting. Selective felling is allowed.
Black alder forests	Presence of black alder at least 5 trees in the stand. The age of the plantation is more than 60 years.	Prohibition of business activities. Strict preservation regime is established due to allocation to rare habitats, high vulnerability of forests with black alder to mechanical impacts.

Table E7 – Rare ecosystems of Perm territory

Rare Ecosystem Type	Criteria of Allocation for Forest Regions			
	Middle Urals Taiga Region	West Urals Taiga Region	Southern Taiga Region	Area of coniferous-broadleaf forests (mixed) forests of the European part of the Russian Federation
Ericetal pine forests <i>* (complies with the forest type HPF – heather pine forests – In the forest taxation description)</i>	Probably none	Common pine is a dominant wood species in the forest stand. The age of the forest stand is 80 years and more. The composition of the herbaceous-shrub	None	None

		layer is dominated by common heather.		
Oak and pine forests	None	None	Probably none	Both oak and common pine are present in the forest stand. The pine share in the forest stand is 50 % and more. The age of the forest stand is from 80 years.
Reindeer moss pine forests* (<i>complies with the forest type LPF – lichen pine forests – in the forest taxation description</i>)	Common pine is a dominant wood species in the forest stand. The age of the forest stand is 80 years and more. Lichens are dominant in a moss lichen layer (predominantly <i>Cladonia</i> and <i>Cetraria</i>)	Common pine is a dominant wood species in the forest stand. The age of the forest stand is 80 years and more. Lichens are dominant in a moss lichen layer (predominantly <i>Cladonia</i> and <i>Cetraria</i>)	Common pine is a dominant wood species in the forest stand. The age of the forest stand is 80 years and more. Lichens are dominant in a moss lichen layer (predominantly <i>Cladonia</i> and <i>Cetraria</i>)	Probably none
Forests with Siberian pine (Siberian cedar)	The share of Siberian pine in the forest stand is 20 % and more. The age of the forest stand is 80 years and more.	The share of Siberian pine in the forest stand is 30 % and more. The age of the forest stand is 80 years and more.	The share of Siberian pine in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.	Probably none
Forests with larch	The share of larch in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.	The share of larch in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.	The share of larch in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.	The share of larch in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.
Coniferous-broadleaved forests with predominant or significant share of linden (and/or oak, elm, Norway maple) in a tree layer	The share of linden or other broad-leaved species in the forest stand is 40 % and more. In addition to broadleaved species, the stand includes spruce and fir. Age of stands is 80 years and more.	The share of linden or other broad-leaved species in the forest stand is 20 % and more. In addition to broadleaved species, the stand includes spruce and fir. Age of stands is 80 years and more.	The share of linden or other broad-leaved species in the forest stand is 60 % and more. In addition to broadleaved species, the stand includes spruce and fir. Age of stands is 80 years and more.	Not rare
Linden forests	Probably none	Probably none	The share of linden in the forest stand is 80 % and more. A small admixture of other broadleaved species in the stand is acceptable. Age of stands is 80 years and more.	Not rare
Oak forests (or with oak)	None	None	The share of oak in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.	The share of oak in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.
Pine forests on rock outcrops	The share of common pine in the forest stand is 60 % and more, presence of larch is possible.	The share of common pine in the forest stand is 60 % and more, presence of larch is possible.	The share of common pine in the forest stand is 60 % and more, presence of larch is possible.	The share of common pine in the forest stand is 60 % and more, presence of larch is possible.

	The age of the forest stand is 80 years and more. Grow on rocks, stones, cliff edges.	The age of the forest stand is 80 years and more. Grow on rocks, stones, cliff edges.	The age of the forest stand is 80 years and more. Grow on rocks, stones, cliff edges.	The age of the forest stand is 80 years and more. Grow on rocks, stones, cliff edges.
Forests with elm	Probably none	Probably none	The share of elm in the forest stand is 10 % and more. The age of the forest stand is 80 years and more.	The share of elm in the forest stand is 20 % and more. The age of the forest stand is 80 years and more.
Park birch forests of the Kungur forest-steppe*	None	None	None	The share of birch in the forest stand is 80 % and more. Age of forest stand is 50 years and more. Occupy watershed (upland) areas.
"Mountain" pine forests of the Kungur forest-steppe*	None	None	None	The share of common pine in the forest stand is 50 % and more. The age of the forest stand is 80 years and more. Grow on rocks, stones, cliff edges, and slopes of southern, south-eastern, south-western exposures.
Pine and birch forests of the Kungur forest-steppe*	None	None	None	The share of birch in the forest stand is 60 % and more. The stand also includes common pine. The age of stands is 60 years and more. Grow on slopes of different exposures.

* Rare only for the territory of the botanical-geographical area of Kungur island forest-steppe.

Instruction –

1. The requirement of prohibition of business activities in reindeer moss pine forests (forest taxation plots with forest type LPF — lichen pine forests with the age of 80 years and more) can be applied locally in Gaynskoe forestry section. If the area of such plots in the territory of a leased (managed) forest area exceeds 1 % of its forested area occupied by mature and overmature forest stands, it is possible to perform restricted business activities on these sites in commercial forests provided that the total share of forest taxation plots complying with the type of rare ecosystems – lichen pine forests – will not decrease below 1 % of the forested area of mature and overmature forest stands of the leased (managed) forest area.
2. The criterion of the share of Siberian pine the forest stands of 30 % and more for identification of rare ecosystems *Forests with Siberian pine (Siberian cedar)* in the territory of the forestry sections located in West Ural taiga region is applied in a limited manner. If the area of such plots in the territory of a leased (managed) forest area is less than 1 % of its forest area occupied with mature and overmature forest stands, the Organization shall use the share value for Siberian pine in the forest stand of 20 % to preserve the additional areas.

Table E8 – Rare ecosystems of the Russian Federation

Region	Type of rare ecosystem	Criteria
Primorsk territory	Forests with needle (Manchurian) fir	Presence of needle (Manchurian) fir in the forest stand.
European Russia	Polydominant broad-leaved forests	Mature and overmature forests with four or more species of the following broad-leaved trees in the stand: oak, ash,

		linden, elm, Norway maple, English field maple, sycamore maple
	Oak forests	Overmature forests with oak in the forest stand of 4 trees and more.
European Russia and Western Siberia	Spruce-fir-linden forests	Overmature forests with presence of fir in the stand of 3 trees or more, linden – of one tree or more.
All regions of Siberia	Taiga	Overmature fir forests (fir is the predominant species) with aspen (at least 2 trees) in riverian, tall grass, fern-grass types or their combinations. E.g., riverian and Tame-grass (TG), and Fern-grass (FG), Reed grass (RG).

E5 Important Plant Areas

Important Plant Areas (IPAs) are areas of special importance for conservation of flora and vegetation diversity. Identification criteria of such areas were developed by the international non-governmental organization Plantlife [12]. An IPA must meet at least one of the following criteria:

Criterion A: The area contains one or several endangered species at a global or national scale; one or several endemic species with extremely restricted habitat that are potentially endangered.

Criterion B: The area contains a large number of species within a particular habitat or vegetation type; an exceptional number of species of high conservation importance or social, economic or cultural value.

Criterion C: The area contains plant habitats/species that are endangered or with limited distribution at the global, regional or national level and/or habitats that have been severely reduced at the national level.

In Russia, a slightly modified criteria were used to identify IPAs on the basis of which IPAs were identified for the following regions: Kemerovo region, Altay territory, the Republic of Altay, Khakassia and Tyva. IPAs in these regions are also located in the forest lands. Some of them are fully or partially protected by Specially Protected Natural Reservations status. The information on location of IPAs is available on the website of NSFC [7] or in the publication "Important plant areas of Altay-Sayan ecoregion: identification experience" [13].

Example of an action plan for developing measures to conserve the natural values of IPA is as follows:

- Protection of IPA by various types of conservation areas should be analyzed – Specially Protected Natural Reservations, protection forests, Special Protected Forest Areas, etc. It is necessary to determine in which of them cuttings are prohibited.
- For the remaining part of the IPAs the necessary conservation measures can be found in the above-mentioned publication. If conservation measures are not described, are described in insufficient detail and obscurely, or if the organization considers it appropriate to apply other measures, consultations with interested parties (scientific organizations, higher education institutions of the specified regions) should be carried out. If necessary, experts may be involved.

Conservation measures may include various restrictions, including the prohibition of economic activities.

E6 Special Areas of Conservation

In general, the methodology for identifying SACs was approved by the Standing Committee of the Bern Convention, where Russia was present as an observer.

On the territory of Russia, the areas recommended for inclusion in the SACs have been identified in part of the constituent entities of the Russian Federation in European Russia [14].

Most of the SACs coincide with existing conservation areas, but a number of areas do not yet have an official conservation status. The descriptions of the SACs in the above websites provide information on the location of these areas, their natural values, and recommended conservation measures. In the part of the SACs that has the status of the Specially Protected Natural Reservation, the Organization should be guided by the regime established for this Specially Protected Natural Reservation. If the measures to conserve the natural values of

the SACs are not described in sufficient detail and clarity, or if the organization considers it appropriate to apply other measures, interested parties (e.g., authors of the SACs descriptions) should be consulted. Experts may be involved, if necessary. Conservation measures may include various restrictions, including prohibition of economic activities.

E7 Approximate procedure for assessing conservation of existing and potential habitats of the most vulnerable, rare and endangered species (informative)

The purpose of the assessment is to take preventive measures to conserve the most vulnerable, rare and endangered species (hereinafter referred to as rare species) and their habitats.

The result of such an assessment may be the specification of criteria for the identification and conservation of potential habitats, necessary protection measures (limitation of business activity) for their conservation, and a monitoring program for key habitats. To improve the reliability of the Organization's assessment, field inspections should be envisaged.

When preparing field inspections, it is necessary to plan routes and sites in advance, taking into account which experts will participate in the survey and which rare species are planned to be identified. It is recommended that the planning be done jointly by experts and specialists of the organization.

Examples of preparation to field inspections

1. The leased (managed) area may be home to rare bird species according to the Red Data Book, and the organization has invited an ornithologist to conduct surveys.

The ornithologist determined that the first priority was to conduct a survey to identify the most vulnerable bird species that may inhabit the leased (managed) area – osprey, white-tailed eagle and golden eagle. He studied cartographic documents, taxation descriptions, other sources of information and planned the route and areas to be inspected taking into account what habitats are the most typical for these bird species. The ornithologist also determined the timing of the work, taking into account when the presence of birds or their habitats are easier to detect.

The opportunities to implement the planned route, visit the planned areas and provide necessary resources, as well as due dates are discussed by the experts and employees of the organization.

2. The organization decided to use the approach of inspecting areas (sites) planned harvesting next year and invited experts, particularly a botanist and a zoologist to conduct the field inspection.

The experts analyzed information about the areas to be cut (taxation descriptions, cartographic documents, other information) and defined that out of 20 areas rare bird species could most likely live in 7 of them. They plan to inspect these very sites. Experts defined due dates for the field inspection. The botanist and the zoologist could determine different due dates related to biology and ecology specifics of rare species which could potentially live in the areas chosen for the inspection. For example, for the botanist it is reasonable to make the inspection in June or July when plants are in blossom and it is easy to find them. The zoologist might choose May or winter months as nesting sites are easier to locate during this period.

The opportunities to implement the planned route, visit the planned areas and provide necessary resources, as well as due dates are discussed by the experts and employees of the organization.

Based on the results of the work, experts may in some cases propose recommendations for monitoring of rare species. If economic activities are planned near the habitat of a rare species, or if the species is very rare, vulnerable or poorly studied, it is necessary to monitor it. When selecting sites for monitoring, the convenience of the site to be monitored should also be taken into account (e.g., the site is clearly visible, easily identifiable, the site is conveniently located and accessible). With appropriate training, monitoring can be conducted by employees of the organization.

Example

A population of the rare plant species from the Orchid family, the lady's slipper (*Cypripedium calceolus*) was found in the harvesting site. This species is listed in the Red Book of the Russian Federation. In order to preserve the population of the lady's slipper, the experts suggested that the site should be designated as a non-commercial area, and the rest of the harvesting area should be clear-cut as planned. This population of the lady's slipper could be monitored to ensure that the measures taken are sufficient not only in the short term (change in conditions after

harvesting), but also in the long term (when the harvesting area becomes overgrown with herbaceous and woody plants). The frequency of monitoring can be as follows: in 1 year after harvesting, in 3 years after harvesting and then once every 5 years.

The harvesting area is accessible in summer, and the lady's slipper, a large bright flowering plant, is a convenient object for monitoring.

Monitoring parameters are defined by the experts, for example, the monitoring parameters of the lady's slipper can be as follows:

- number of shoots;
- proportion of floriferous shoots;
- proportion of fruits formed to the number of flowers;
- height of shoots;
- sizes of leaves;
- etc.

Tracking of values of the chosen parameters will enable to determine condition of the population, impact of environmental changes on it, effectiveness of protection measures taken.

Upon completion of the field inspections, the organization's management should discuss the inspection results with experts, including where and what species were found and recommended conservation measures.

The report on field inspections to identify habitats of the most vulnerable rare, and endangered species should include:

- A description of the criteria for selecting sites to be inspected, a list of rare species that may inhabit the planned sites, and an indication of routes and sites on map materials;
- a list of rare species identified during fieldwork, indicating the category of rarity status and threat status category (if defined),
- for each identified rare species it is necessary to provide the following: a brief description and photo of the habitat, coordinates, indication on the map-scheme of the quarter of the place of detection, recommended measures for the protection of rare species and their habitats;
- photos of a species item, population of a rare species and/or (for animals) traces of presence;
- monitoring recommendations (if needed).

Annex F **(normative)**

Application of principles of free, prior and informed consent

Free, prior and informed consent (FPIC) is a legal condition for carrying out an economic activity that is considered to have been obtained if it is given freely (without coercion) by a person (group of persons) prior to the commencement of the relevant activity and is based on a clear assessment and understanding of the facts, results and future consequences of the activity or decision. The person (group of persons) giving such consent has the right to participate in decision-making with respect to economic activities, to give, withhold, modify, suspend or withdraw consent to activities affecting their rights.

Indigenous peoples' right to FPIC is established by the UN Declaration on the Rights of Indigenous Peoples [15], as well as ILO Convention 169 on Indigenous and Tribal Peoples.

The right to grant FPIC is aimed at protecting traditional ways of life, livelihoods, when they are threatened. The task of FPIC is to use it where other mechanisms are insufficient to protect rights – for example, interaction procedures, allocation of areas of special cultural, environmental, economic, religious or spiritual value, etc. FPIC should not be a substitute for these mechanisms.

According to 6.2.2, the organization shall obtain consent from indigenous communities for economic activities that may affect their rights to territories or resources in those territories.

However, if the organization changes its business operations in a way that does not affect the rights of affected parties, consent is not required. In this case, the organization must notify the parties claiming their rights about the changes in its business activities.

The rights to favorable environment, free access to the forest, collection of mushrooms, berries and other non-timber resources, hunting on forest lands in general, but not in a specific area, also do not require consent. In addition, in cases where the affected parties are likely to have rights, but do not provide an opportunity to confirm them or determine the measures necessary to protect these rights (unreasonably refuse to participate in the interaction), consent is not required.

The territory in respect of which the affected party has the rights, with a few exceptions, cannot be the entire lease area. If the affected party's rights extend over large areas, zoning is required. It is possible to designate zones where economic activities can be carried out without restrictions. Consent is not required for such zones, provided that their designation has been done in consultation with the rights holders.

Consent should be obtained through interaction and taking into account the interests of both parties. Representatives of the affected parties may be local self-government bodies, local public organizations; it is also possible to interact with representatives of the affected parties directly, including through a collective body (e.g., people's assembly or initiative group) or by other means. The process of obtaining consent may take a long time. This is acceptable if the process is organized and promoted in good faith on both sides. Good faith implies that both parties make every effort to reach agreement: conduct real and constructive negotiations, give each other sufficient time to discuss and resolve disputed issues, respect the agreements made, and avoid delays in negotiations.

An affected party may refuse consent for planned economic activities if the organization's consent process is not conducted in good faith or if there is objective evidence that the only way to avoid harm to the affected party is to refuse the planned economic activity.

If the affected party's consent is not obtained, the organization must refrain from carrying out the economic activity that affects the relevant rights.

If there is no objection from the affected party, and there is no evidence that their rights have been violated, the organization may carry out the planned economic activity in parallel with the consent process.

In some cases, an organization may be forced to withdraw consent:

- When obtaining consent conflicts with other requirements of the standard, provided that the identification of rights and informing the affected party is done in good faith. For example, if the affected party's refusal would result in job losses that would have negative social consequences that the organization has a duty to mitigate.
- When obtaining consent from one affected party would bring the organization into conflict with other affected parties, or between different affected parties. Where different affected parties claim rights to the same territory and/or resource, and are in conflict with each other over it, the consent requirement does not apply until such conflict is resolved. The organization is not obliged to participate in the resolution of such a conflict, as it is not a party to it.

Information about the organization's forced refusal to obtain consent should be communicated to the certification body, which will assess the situation on a case-by-case basis in coordination with the affected party and the organization.

Engagement with the affected party should result in an agreement (contract) that records in writing the affected parties' consent for the organization to carry out business activities that affect their rights and sets out the parties' obligations to each other. Through interaction between the affected party and the organization, it is determined for which business activities consent should be obtained and for how long it is issued. The parties must comply with the agreements reached. The agreement does not provide for any mandatory material compensation from the organization. The affected party may revoke or modify the agreements reached before the end of its term only if the organization violates the agreements.

Bibliography

- [1] Federal Law dated December 27, 2002 No. 184-FZ "About Technical regulation".
- [2] STO NSFC.001-48861355-2023 "National Risk Assessment".
- [3] Federal Law dated December 4, 2006 No. 200-FZ "Forestry Code of the Russian Federation".
- [4] Water Code of the Russian Federation dated 03.06.2006 No. 74-FZ.
- [5] Labour Code of the Russian Federation dated 30.12.2001 No. 197-FZ.
- [6] Decree of the Government of the Russian Federation dated 04.04.2016 No. 265 "On the limit values of income received from entrepreneurial activity for each category of small and medium-sized business entities".
- [7] Website of NSFC in the internet.
- [8] Decree of the Government of the Russian Federation dated 13.09.1994 No. 1050 "On measures to ensure compliance with the obligations of the Russian Party arising from the Convention on Wetlands of International Importance primarily as Waterfowl Habitat, dated February 2, 1971.
- [9] The website "Wetlands of Russia" on the Internet information and telecommunications network – <http://www.fesk.ru/>.
- [10] The website of Birdlife International on the Internet information and telecommunications network – <http://www.birdlife.org/datazone/site>.
- [11] Website of the Russian Birds Conservation Union on the Internet information and telecommunications network – <http://www.rbcu.ru/programs/54/>.
- [12] Website of international non-governmental organization Plantlife on the Internet information and telecommunications network – <https://www.plantlife.org.uk/protecting-plants-fungi/important-plant-areas/>.
- [13] Artemov I.A., Lashchinsky N.N., Korolyuk A.Yu. et al.; edited by I.E. Smelyansky, G.A. Pronkina. Important plant areas of Altay-Sayan ecoregion: the experience of allocation / Novosibirsk: Academic Publishing House "Geo", 2009. 260 p.
- [14] Website of the Emerald book of the Russian Federation on the Internet information and telecommunications network – <http://www.xidi.ru/>; NSFC website <https://nsfs.bitrix24site.ru/>.
- [15] Resolution No. 61/295 of the General Assembly dated September, 13 2007 "UN Declaration on the Rights of Indigenous Peoples".
- [16] ILO Convention No. 169 dated June 27, 1989 "Convention on Indigenous and Tribal Peoples in Independent Countries".

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