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MINISTRY OF FORESTRY OF THE REPUBLIC OF BELARUS FOREST INVENTORY REPUBLICAN UNITARY ENTERPRISE"BELGOSLES"

BELARUSIAN FORESTRY DEVELOPMENT PROJECT

GEF/ THE WORLD BANK

TFOA1173

Approved First Deputy Minister of Forestry ______V.G. Shatravko

Report No. 4

under Contract No. BFDP/GEF/SSS/16/20-42/19 dated 28.06.2019

Activity 1.3.4: Automation of accounting of planting material for development of forest seeding and forest nursery framework of forestry

on organization and holding of round-table discussions to demonstrate the new AWS "Seed production of forest plants" and AWS "Nursery accounting" and publication of the information booklet in Russian and English about the developed AWSs

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Minsk 2021

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ABBREVIATIONS AND ACRONYMS

Ministry of Forestry	the Ministry of Forestry of the Republic of Belarus;
SPFA	state production forestry association;
SFE	state forestry enterprise
RFSSC	the "Republican Flax Selection and Seed Center" institution;
LA DB	legal act; database with the minimized redundancy (repeatability) of data, where all data are stored in a logically linked form;
Plan	the Plan of agrotechnical activities and actions;
Nursery	permanent forest nursery;
User	carrying out specific functions and/ or tasks:
DBMS	Database management system;
S	software is a set of programs, program codes and software products with technical documentation required for their operation;
AWS	automated workstation;
AWS-N	AWS "Nursery accounting";
AWS-S	AWS "Seed production of forest plants";
PFSB	permanent forest seed base;
FSP	forest seed plantation;
PFSP	permanent forest seed plot;
FARSP	farming seed planting;
GIS	geographical information system.

EXECUTIVE SUMMARY

Currently, all primary accounting documentation related to seed production and nursery accounting in forestry institutions of the Republic of Belarus is filled out on paper, and reporting and consolidated documentation is filled out and calculated manually.

So far, all works on accounting of works in nursery and forest seed bases were carried out manually, and forecasts for the cultivation of planting material and harvesting of forest seeds for the needs of reforestation were not always objective, especially in recent years, when the share of land in need of reforestation and afforestation as well as the land with these measures carried out on it, has increased significantly. To improve the efficiency of work on accounting, mitigating the errors when creating report documentation necessary for decision-making and rapid situation analysis, the automation of all the processes was carried out by developing the AWS software products "Seed production of forest plants" and "Nursery accounting".

All documents are filled out electronically and consolidated and reporting documents are generated automatically followed by uploading to Word for printing out. All output forms of documents correspond to the forms of documents approved by Resolution No. 73 of the Ministry of Forestry of the Republic of Belarus as of December 19, 2016 "On some issues of forest reproduction in the field of seed production of forest plants", by Resolution No. 76 of the Ministry of Forestry of the Republic of Belarus as of December 19, 2016 "On some issues of forest reproduction in the field of growing planting material of forest plants "and TCP 575-2015"Guide on growing planting material of tree and shrub species in forest nurseries of the Republic of Belarus".

Under the contract, databases were developed for the above-mentioned software products. The applications use PostgreSQL DBMS and MSSQL Server. They were chosen for further simple integration with the QGIS mapping application, and since these software products were implemented using the entity framework technology, if desired, they can be easily converted to another DBMS.

In terms of integration with other information systems, links and connections with the following software products have been implemented:

1. Interaction of the software products with Microsoft Office. This interaction is implemented for creating documents and the following printing out;

2. Interaction of the software products with the accounting programs (1C: Forestry, etc.). It implements data exchange through files that transfer information from one software product to another.

After completing the development and trial operation, workshops were held with participation of specialists responsible for seed production and nursery management and accounting.

INTRODUCTION

The main objective of Activity 1.3.4 "Automation of accounting of planting material in order to develop forest seed and nursery base of forestry enterprises" within the framework of the Forestry Sector Development Project of the Republic of Belarus is the development of the following:

- a new AWS (software product) "Nursery accounting" allowing to monitor production of planting materials in forest nurseries, movement of materials at all stages as well as determine the cost of production of planting materials;

- a new AWS (software product) "Seed production of forest plants" allowing to monitor and control production of seeds of forest plants, handling of seeds of forest plants at all stages, use of harvested seeds, operation of the existing seed plantations, etc., as well as to determine the actual cost of the works on seed production.

Implementation of the tasks for development of AWSs is based on creation of software with the functions that ensure automation of document management.

After completion of the development and trial operation, on the basis of state production forestry associations, workshops (round-tables discussions) were held on operating the AWS "Nursery accounting" and the AWS "Seed production of forest plants", where specialists responsible for nursery management and accounting as well as seed production participated.

The main results of the round- table discussions within Activity 1.3.4 make up the content of this report.

1 ROUND-TABLE DISCUSSIONS

Due to the unfavorable epidemiological situation, all round-table discussions were held via videoconferences on the ZOOM platform.

On February 2, 2021, Brest, Vitebsk, Grodno SPFAs as well as representatives of the RUE "Belgosles" and BSTU took part in the workshop.

On February 3, 2021, the workshop was attended by Gomel, Minsk, Mogilev SPFAs as well as representatives of the RUE "Belgosles" and BSTU.

A total of 110 specialists took part in the round-table discussions.

The goal of the round-table discussions was to present the new software products AWS "Nursery accounting" and AWS "Seed production of forest plants" as well as to listen to opinions and comments on the operation of the software from specialists working in forestry institutions.

In total, two round-table discussions were held with participation of specialists and representatives of state production forestry associations and their subordinate forestry institutions involved in the field of forest seed production and nursery management and accounting.

The RUE "Belgosles" was an organizer of the round-table discussions (workshops).

1.1 Participants of the workshops

68 people took part in the workshop on February 2, 2021. The list of participants is given in the table below (Table 1).

RUE "Belgosles"		
A.N. Karas	Chief Engineer	
M.V. Zubko	Deputy CEO for Information Technologies	
Ye.V. Babeiko	Head of Software Development and Technical Support Department	
R.S. Drazhin	Software Engineer of the Software Development and Technical Support	
	Department	
	BSTU	
V.V. Nosnikov	Head of the Department of Forest Crops and Soil Studies, Candidate of	
	Agricultural Sciences, Associate Professor	
Brest SPFA		
A.N. Matiushevski	Chief Forester, SPFA	
T.V. Telpuk	Forestry Engineer, SPFA	
M.N. Zhikharko	Chief Forester, Baranovichi forestry	
Ye.M. Lomskaia	Reforestation Engineer, Baranovichi forestry	
G.M. Telipko	Chief Forester, Brest forestry	
R.Yu. Ardytski	Reforestation Engineer, Brest forestry	

Table 1. List of the workshop participants on February 2, 2021

A.N. Krisiuk	Chief Forester, Gantsevichi forestry
O.G. Babich	Reforestation Engineer. Gantsevichi forestry
D.A. Tkachuk	Chief Forester, Domanovsky forestry
O.M. Mialik	Reforestation Engineer, Domanovsky forestry
V M Vazhinski	Chief Forester, Drogichinsky forestry
Ye G. Toystyka	Reforestation Engineer Drogichin forestry
R L. Metechko	Chief Forester, Jvatsevichi forestry
T P Zhigar	Head of the complex Tyatsevichi forestry
N.P. Kochik	Chief Forester, Kobrin forestry
A.A. Levchuk	Reforestation Engineer. Kobrin forestry
R D. Migalevich	Chief Forester, Luninets forestry
V.P. Pomozov	Reforestation Engineer. Luninets forestry
D.V. Gerasimenko	Chief Forester, Lyakhovichi forestry
M.N. Dvdvshko	Reforestation Engineer. Lyakhovichi forestry
V.V. Petruchik	Chief Forester, Malorita forestry
S.V. Kren	Reforestation Engineer. Malorita forestry
V.M. Verkhushkin	Chief Forester, Pinsk forestry
A.N. Trubei	Reforestation Engineer Pinsk forestry
D.E. Bakunets	Chief Forester, Polessky forestry
I V. Kotko	Reforestation Engineer, Polessky forestry
D.M. Kozel	Chief Forester, Pruzhany forestry
V.V. Ostapuk	Reforestation Engineer. Pruzhany forestry
S.M. Litvinko	Chief Forester, Stolin forestry
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V.M. Golovach	Reforestation Engineer, Slonim forestry
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The workshop on February 3, 2021 was attended by 47 people. The list of participants is given in the table below (Table 2)

Table 2. List of t	he workshop	participants on	n February 3, 2021
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The RUE "Belgosles"		
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Ye.I. Archipenko	Forestry Engineer, SPFA	
M.Yu. Makeenko	Reforestation Engineer, Buda-Koshelevo Experimental Forestry	
V.N. Belaia	Head of Forestry Department, Vasilevichi forestry	
O.S. Semechko	Reforestation Engineer, Gomel forestry	
A. A. Prikhodko	Head of Forestry Department, Yelsk forestry	
P. Yu. Verteiko	Chief Forester, Zhlobin forestry	
R.Dzh. Sachek	Reforestation Engineer, Zhlobin forestry	
A.V. Naumenko	Head of nursery, Zhlobin forestry	
A.G. Kuznetsov	Reforestation Engineer, Komarinsky forestry	
I.V. Zabolotskaia	Head of Forestry Department, Loev forestry	
M.A. Anisovets	Reforestation Engineer, Loev forestry	
A.M. Markevich	Chief Forester, Miloshevichi forestry	
N.A. Godlevskaia	Head of nursery, Mozyr Experimental Forestry	
O.V. Aniko	Reforestation Engineer, Mozyr Experimental Forestry	
A.V. Dvorak	Chief Forester, Narovlya forestry	
N.I. Kobylinski	Reforestation Engineer, Narovlya forestry	
Ye.V. Lanko	Reforestation Engineer, Petrikov forestry	
A.S. Kotov	Automated Control System Engineer, Rechitsa Experimental	
	Forestry	
S.N. Meshchenok	Reforestation Engineer, Rechitsa Experimental Forestry	
Yu. O. Romanovich	Reforestation Engineer, Khoiniki forestry	
A.V. Morozov	Chief Forester, Chechersk forestry	
I.V. Mamekina	Reforestation Engineer, Chechersk forestry	

Minule SDEA			
Millisk SPFA			
L.A. Makarevich	Forestry Engineer, SPFA		
S.M. Baranovski	Chief Forester, Volozhin forestry		
T.S. Kozyro	Reforestation Engineer, Volozhin forestry		
V.A. Stepanovich	Head of nursery, Kopyl Experimental Forestry		
G.A. Shemetilo	Reforestation Engineer, Kopyl Experimental Forestry		
O.A. Lugovtsov	Head of nursery, Krupki forestry		
M.M. Miranovich	Reforestation Engineer, Minsk forestry		
A.N. Matusevich	Head of nursery, Minsk forestry		
Yu.A. Korol	Reforestation Engineer, Smolevichi forestry		
A.N. Lapina	Reforestation Engineer, Starobin forestry		
I.A. Sergienia	Head of nursery, Starobin forestry		
Zh.V. Sobol	Reforestation Engineer, Uzda forestry		
Yu.A. Khrol	Head of nursery, Uzda forestry		
Mogilev SPFA			
V.V. Golovnev	Leading Engineer, SPFA		
Ye.A. Porsik	Reforestation and Reclamation Engineer, Glussk Forestry		
A.V. Rubanik	Reforestation and Reclamation Engineer, Gorki forestry		
T.A. Garusova	Head of nursery, Gorki forestry		
A.R. Lukianets	Reforestation and Reclamation Engineer, Osipovichi Experimental		
	Forestry		

1.2 Opening of the workshop. Goals and objectives

Introduction. The speaker is Ye.V. Babeiko

The Republic of Belarus is one of the most forested countries in Europe and Central Asia. The Government of the Republic of Belarus recognizes the importance of investments, new technologies and capacity building in the forestry sector as well as the need to sustainably meet the growing demand for forest-based products both among the wood processing industry and in the wood energy sector.

In this regard, the goals of developing the Project are to increase the efficiency of forestry management, efficiency of reforestation and afforestation, to increase the use of felling residues and increase the contribution of forests to the achievement of public good in target forest areas of the Republic of Belarus.

To implement the tasks of transition to sustainable forest management, intensification of forestry, optimization of woody biomass production, transition to modern methods of reforestation through introduction of modern technologies, it is necessary to attract long-term investment resources such as loans from the World Bank. Such mechanisms for solving problems will ensure the rapid and effective introduction of advanced technical solutions and technologies into the practice of forest management and forestry, including the latest developments of the global community. This will allow, on the one hand, to reduce the burden on the budget at the moment, and on the other hand, to attract high-level specialists to solve these problems. During the implementation of the Project, strategically important tasks of building national capacity for sustainable forest management, achieving environmental, economic and social benefits will be solved.

In Belarus the restoration of forest areas after felling is carried out as far as possible through natural regeneration. However, in some cases, this is not the most optimal method, since sometimes some areas should be restructured using other types of forest crops and there is a need for reforestation in the affected forest areas (windblows, snow, fires, drying out of spruce and pine forests, etc.), and in some areas it is not possible to ensure successful natural reforestation. In this regard, there is a regular need for production of good quality planting material, including from selected plus trees of well-known origin with the correct composition of forest species. An advanced technology for processing forest seed materials and storing seeds of forest plants has been introduced and has been functioning, which makes it possible to obtain high-quality seed material and ensure its full, long-term storage.

Together with a well-functioning general system for production of selection and planting material, there is a problem of accounting for material and financial costs for creation, operation and procurement of forest seed materials and seeds of forest plantations, production and movement of planting material, calculating the need for seed and planting material in order to efficiently use the existing facilities. At present in the forestry enterprises specialists record the movement of planting material, calculate the financial costs for production of planting material, make an inventory of permanent forest seed base facilities, record material and financial costs for setting up, operating, harvesting forest seed materials and seeds manually, filling out forms on paper. As part of this Activity, two software products were developed: the AWS "Nursery accounting" and the AWS "Seed production of forest plants".

Calculation of economic indicators is important, both for determining the actual cost of production of planting material and for assessing the ecosystem services provided by forest ecosystems. Economic indicators and costs are important factors in deciding whether to produce planting material for specific tree species, including broadleaf and rare tree species, to determine the best directions for movement of planting material to provide all forestry enterprises with planting material to meet their needs. Testing of the developed AWSs was carried out on the basis of 6 forestries (1 forestry enterprise in each region).

These software products were designed by the RUE "Belgosles" within the framework of the Forestry Sector Development Project of the Republic of Belarus Activity 1.3.4. The terms of reference within the framework of this event provide for the holding of round-table discussions with specialists of forestry institutions to work with AWSs.

The round-table discussions will include reports outlining methodological approaches to accomplishing the tasks of Activity 1.3.4, functionality and procedure for using the developed software.



Figure 1. Participants of the workshop held on February 2, 2021



Figure 2. Participants of the round-table discussion organized on February 3, 2021



Figure 3. Demonstration of the software



Figure 4. News about holding round-table discussions on the website of the RUE "Belgosles"

1.3 General characteristics and functions of the AWS "Nursery accounting" and the AWS "Seed production of forest plants"

The speaker is Ye.V. Babeiko

The objectives of the AWS "Nursery accounting" include the following:

- monitor the production of planting materials in forest nurseries, the movement of materials at all stages;
- determine the cost of production of planting materials;
- store and control documentation related to seed production;
- generate consolidated and reporting documents;

The objectives of the AWS "Seed production of forest plants" include the following:

• monitoring and control of forest plant seed production, treatment of forest plant seeds at all stages, use of collected seeds, operation of the existing seed plantations, etc.;

- determination of the actual cost of works on seed production;
- storage and control of documentation related to seed production;
- generation of consolidated and reporting documents.

The AWS "Nursery accounting" processes the following documents:

- certificates of technical acceptance of works in the sowing section;

- certificates of technical acceptance of works in the transplant section;

- certificates for writing-off the dead crops, transplants sections and plantations in nurseries;

- information about the technical acceptance of works in the sowing sections of forest nurseries;

- information about the technical acceptance of works in the transplant

sections of forest nurseries;

- field inventory cards of seedlings, saplings and shortened cuttings.

The AWS "Nursery accounting" allows to generate the following reporting documents:

- reports on available planting material in nurseries, transplant sections

and plantations;

- consolidated sheets of standard seedlings and shortened cuttings by years in transplant sections;

- calculation of monthly efficiency;

- calculation of annual efficiency.

The AWS "Seed production of forest plants" processes the following documents:

- passports for batches of raw materials / cones;

- passports for batches of raw materials / wings;

- passports for batches of seeds;

- certificates of quality of forest plant seeds;

- passports of forest seed plantations;

- passports of plus forest stands;

- passports of plus trees;

- passports of permanent forest seed plots;

- consolidated sheets of farming seed plantations;

- passports of forest genetic reserves;

- a record book of accounting of forest seeds harvested by an enterprise in its own forestry;

- a record book of accounting of forest seeds purchased by an enterprise in other forestries.

The AWs "Seed production of forest plants" generates the consolidated inventory sheets: FSO, PFSB, PT, PFSP, FSP, FGR.

The pilot industrial operation of these AWSs was carried out on the basis of six forestries:

- 1. Glubokoye experimental forestry;
- 2. Shchuchin forestry;
- 3. Krupki forestry;
- 4. SFI "Mogilev Forestry";
- 5. Rechitsa experimental forestry;
- 6. Ivatsevichi forestry.

Comments on improving the quality of the software are received, summarized and taken into account when fine-tuning the software.

1.4 Requirements to use of the software products AWS "Seed production of forest plants" and the AWS "Nursery accounting"

The speaker is Ye.V. Babeiko

The following software is required to use the AWSs:

- MS Windows 7 + operating system;
- MS Word Office 2007 +;
- Net Core 3.1 or MSSQL Server.

The AWSs maintenance should be carried out by MICS engineers. Users shall ensure that primary documentation is entered.

To install the AWSs it is necessary to download the respective installers from the ftp-server of the RUE "Belgosles".

To install, you should run the installer file and specify the path of installation of the application (any convenient place on your personal computer).

It is necessary to install NetCore 3.1 to operate these AWSs.

The AWS database is automatically created the first time you run the application.

1.5 Major outcomes of the round-table discussions

During the workshops discussion and analysis of legal documents, reference materials and production documentation necessary for working in the AWSs as well as analysis of service and production situations, solving specific production tasks as well as making decisions when working with AWSs were carried out. The practical implementation of the process of creating a report and consolidated documents was demonstrated.

The participants of the round-table discussions noted the high quality of the preparation of the reports presented and the issues under consideration. The questions covered a wide range of problems, were problematic and relevant for forestry.

The attendees were very active, which found the reflection in questions, wishes of the speakers and discussion of reports.

After discussing all the issues of the round table, the participants decided the following:

- forestry institutions have to carry out technical training with specialists in their forestries to work with AWSs;

- taking into account the functions, the following additions/ amendments to the AWSs should be made (Table 3):

Table 3. The required modifications and improvements under the workshop results

1.	Add name of the window "Monthly efficiency" in the AWS "Nursery accounting"
2.	Develop a format for uploading data for calculating the cost from the accounting software of a
	forestry and finalizing the algorithm for calculating the cost in the AWS "Nursery accounting"
3.	Modify AWS "Seed production of forest plants" in terms of correcting an error that does not
	allow to create a new passport with the same number
4.	Modify software products with the possibility to export data to Excel

1.6 Answers to the questions of the workshop participants

Workshop on February 2, 2021

A.F. Grishkevich: Does the workstation allow users to edit the "Species" reference book?*Ye.V. Babeiko: There is no such possibility, since this directory should be the same for all users of the software. The directory will be updated when the software product is updated.*

- A.F. Grishkevich: Are the seeding rates regulated by the quality class in the technical acceptance? I would like the user to be able to edit the seed rates.
- Ye.V. Babeiko: No, in technical acceptance the seeding rates do not depend on the quality class. We will work out the possibility of editing the seeding rate by the user.
- A.F. Grishkevich: Salaries for calculating the cost can be obtained from an order. However, the order does not include other expenses: bonuses, temporary disability benefits, vacation expenses, etc. Therefore, additional data for calculating the cost price must be obtained from the accounting software of the forestry.
- Ye.V. Babeiko: To obtain additional data from a forestry, it is required that the developers of accounting software (more than 10 in the Republic of Belarus) modify the software so that the necessary data is downloaded in a UNIFIED format.
- Stolin forestry: Raw materials can come from various sources, including from other forestry enterprises. Thus, we have a double job: the seed passport is filled out manually by the seller-forestry, and then a full copy of the passport is manually drawn up for entering into the AWS "Seed production" by the buyer-forestry.
- Ye.V. Babeiko: At the moment, the AWS works on local computers and the exchange of data between forestries is not provided. In future, it is planned to create a WEB-version, where all data will be stored on a central server. Thus, a lot of unnecessary filling work will not have to be done, but at the moment it is possible to implement an exchange between forestries by exchange of files.
- Stolin forestry: There may be several persons responsible for filling out passports/ documents. However, the workstation in the settings stipulates only one responsible person.
- Ye.V. Babeiko: In the revised version, we will provide the possibility of making a list of responsible persons in the settings.
- Stolin forestry: When deleting a passport / document from the database, it is impossible to create another passport / document with the same number.
- Ye.V. Babeiko: Замечание принято. Мы проведем доработку.
- Unknown: Why do you make it possible to use PostgreSQL. This is not very convenient, because many forestries use other DBMS.
- Ye.V. Babeiko: All forestries are business entities that have the right to use software at their own discretion. I repeat that it is planned to transfer the software to the WEB-version.
- Grodno forestry: It is inconvenient that the export of various documents is carried out in the format of a text document, despite the fact that many documents are in the form of tables and it would be logical to export in the format of a spreadsheet document.
- Ye.V. Babeiko: We will carry out the revision so that spreadsheet documents are uploaded in Excel format.

Workshop on February 3, 2021

- Question: Some fields in the field card can be filled with data already available in the database. Is this provided in the software?
- Ye.V. Babeiko: Improvement will be done so that the data is entered only once, i.e. used to transfer data between documents.

2 MAJOR RESULTS OF DEVELOPING THE AWS "SEED PROD OF FOREST PLANTS" AND THE AWS "NURSERY ACCOUNTING"

As a result of development of the software products the forestry institutions will be able to automate the accounting, compilation and storage of the documents, consolidated sheets and reports related to seed production of forest plants and nursery management and accounting with printing out the required information.

In particular, the AWS "Nursery accounting" allows to monitor the production of planting materials in forest nurseries, movement of materials at all stages.

The AWS "Seed production of forest plants" monitors and controls the production of seeds of forest plants, handling of seeds of forest plants at all stages, use of harvested seeds, operation of the existing seed plantations and determines the actual cost of works on the production of seeds.

The developed software products will improve the efficiency and accuracy of management decisions.

COSTS OF HOLDING THE ROUND-TABLE DISCUSSIONS

within the framework of contract No. BFDP / GEF / SSS / 16 / 10-42 / 19 as of June 28, 2019 Activity 1.3.4: Automation of accounting of planting material for development of forest seeding and forest nursery framework of forestry

Development of the AWS "Nursery accounting" and the AWS "Seed production of forest plants"

Activity	Cost,USD
Remuneration, including:	6,500
-experts	2,100
Round-table discussions (workshops) expenses, including:	500
-purchasing a ZOOM license for videoconferencing	450
-stationeries (packs, bags, pens, etc.)	50
Costs for publication and preparation of information booklets (220 items):	3,000
TOTAL	10,000



WORLD BANK GROUP



THE USER MANUAL

THE AWS "NURSERY ACCOUNTING"

THE AWS "SEED PRODUCTION OF FOREST PLANTS"

Minsk, 2021

User manual for the AWS "Nursery Accounting"	3
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User Manual

Automated Workstation "Nursery Accounting"

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ABBREVIATIONS AND ACRONYMS

automated workstation;
AWS "Nursery accounting";
software product;
database with the minimized redundancy (repeatability) of data, where all data are stored in a logically linked form;
the Ministry of Forestry of the Republic of Belarus;
Guide on growing the planting material of tree and shrub species in forest nurseries of the Republic of Belarus (TCP 575-2015).

1 INTRODUCTION

1.1 Scope of application

The AWS application "Nursery accounting" is intended for use in the system of the Ministry of Forestry of the Republic of Belarus, in particular by legal entities involved in forestry.

1.2 Description of functions

The AWS performs the following processes:

- preparation and storage of documents, consolidated sheets and reports related to seed production of forest plants and nursery management and accounting;
- export of the necessary information to print out.

1.3 The required level of users

The users of the AWS-N are employees of forestry enterprises and forestries related to seed production and nursery management.

When recruiting staff for using this SP, preference should be given to specialists having skills in working with information systems.

Qualifications of the SP users are as follows:

- computer literacy at the level of a PC user;
- skills in working with basic office applications: Microsoft Word, Microsoft Excel;
- skills in working with files and file storages of the Microsoft Windows operating system.

1.4 List of operating documentation for the user

The SP user should read the User Manual and the description of the AWS-N system.

2 GOALS AND TERMS OF USE

2.1 Objectives of the AWS "Nursery accounting"

- monitor the production of planting materials in forest nurseries, movement of materials at all stages;
- determine the cost of production of planting materials;
- store and control the documentation related to seed production;
- generate consolidated and reporting documents.

2.2 Terms of application

To use this SP, the following software is required:

- operating system MS Windows 7 +;
- MS Excel Office 2007 +;
- MS Word Office 2007 +;
- GisLes application (optional).

Maintenance of the automated control system should be carried out by the MICS engineers.

Users should ensure input of primary documentation.

3 PREPARATION OF OPERATIONS

3.1 Setup of the AWS "Nursery accounting"

To download the AWS-N, you have to download the installer from the ftp-server of the RUE "Belgosles" at ftp.belgosles.by\!EXE\Nurseries.

3.2 Unpacking the installation files

To install, you should run the installer file. In the process, you also need to specify the path of installation of the application (any convenient place on your personal computer).

For the software to operate, you need to download and install <u>.NetCore 3.1</u> and <u>SQLServer</u>.

3.2.1 NetCore 3.1 installation

Follow the <u>link</u>; Select the version of the package suitable for your computer and click on it (Figure 1).



Figure 1 – Selecting the package version

After downloading, open the installer file. A sample image and default name is shown in Figure 2.

i windowsdesktop-runtime-3.1.10-win-x64

Figure 2 – Sample image and default name of the file

In the window that appears (if there is one) shown in Figure 3, click "Run".



Figure 3 – Confirming the setup of the installer

After starting, accept all the conditions of the installer and wait for the completion of the installation of the component.

3.2.2 SQLServer installation

Run the installer file (sample image and name are shown in Figure 4).

Имя	1000	
🔂 Setup		
🐮 SQLServer20	17-SSEI-Expr	

Figure 4 – Sample image and default name of the file

If a window appears (Figure 5), confirm the start of the installation by clicking the "Start" button.

Вы хот	ите запустит	ь этот фаил?	
	Имя:	D:\Setup\Питомники\SQLServer2017-SSEI-Expr.	<u>exe</u>
	Издатель:	Microsoft Corporation	
	Тип:	Приложение	
	Из:	D:\Setup\Питомники\SQLServer2017-SSEI-Expr.	exe
		Запустить От	мена
🗹 Bcer	да спрашиват	гь при открытии этого файла	
	Файлы из И	1нтернета могут быть полезны, но этот тип фай компьютер. Запускайте только программы.	ла може

Figure 5 – Confirmation of installation

In the window that appears (Figure 6), select the installation type - Basic.



Figure 6 – Selecting the package for installation

Accept the terms of the license agreement (Figure 7).



Figure 7 – License agreement

If necessary, change the installation path in the next window (Figure 8).



Figure 8 – Changing the installation path

After successful installation, the window shown in Figure 9 will appear.



Figure 9 – Confirming the successful installation

3.3 Database creation

The software database is automatically created when the application is first started.

4 DESCRIPTION OF OPERATIONS

4.1 Description of the menu items

Having launched the AWS-N application, you have to select the appropriate item in the main menu of the software (Figure 10). The composition of the main menu is shown in Table 1.



Figure 10 – Main menu of the software

Table 1 – Composition of the software main menu

-
Main menu item
Certificates of technical acceptance of works in the sowing section(Д)
Certificates of technical acceptance of works in the transplant section (E)
Certificates for writing-off the dead crops in transplant sections and nursery plantations (Γ)
Data on technical acceptance of works in the sowing sections of forest nurseries (Ж)
Data on technical acceptance of works in the transplant sections of forest nurseries (K)
Field inventory cards of seedlings, saplings and shortened cuttings (Л)
Reports on available planting materials in nurseries, transplant sections and plantations (M)
Consolidated sheets of standard seedlings and shortened cuttings by years in transplant section (H)
Calculation of monthly efficiency

Main menu item
Calculation of annual efficiency
Settings

4.1.1 Settings

The window is designed to store general information about the nursery, the head and members of the commission, which will then be automatically filled in when creating documents. After clicking on this tab, the window shown in Figure 11 opens.

ип питомника	Председат	гель комиссии
Лесничество	(должность) Члены	(ФИО) КОМИССИИ
Лесхоз	(должность)	(ΦИО)
Область	(должность)	(ΦNO)
State Ball	(должность)	(ΦNO)

Figure 11 – Settings

4.1.2 "Certificates of technical acceptance of works in the sowing section (Д)"

The tab is designed to work with the certificates generated in accordance with Appendix \square of the technical code. After clicking on this menu item, a window with a list of the existing data will appear (Figure 12).



Figure 12 – Window for working with certificates

To create a new act, you have to click on the "Create" button and then a window for creating a document will open (Figure 13), where you should fill out the fields.

ы член		2				
, men	ы комиссии					
роизвел	и приемку работ в	питс	мнике,			
	леснич	ества	лесхоза	06	ласти, при этом о	бнаружено:
бавить (строку					
Nº	Порода	Поле севооборота	Качество обработки почвы	Количество внесённых удобрений,кг	Время посева	Площадь в га (0,01 га)
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аключен	ние комиссии					
	-			_		
редседа	тель комиссии	(должн	ость)		(0N0)	
лены ко	миссии				And the second second	
		(должность)		(ФИО)		
		(должно	сть)	-	(ΦNO)	
	-					

Figure 13 – Creating a certificate

When filling out the certificate in the table, after indicating the species, the seeding rates and the seeding depth are loaded in accordance with Appendix B and Table 7 of the technical code, respectively.

After filling out all the fields, click the "Save" button.

Note: To automatically fill out the "underlined" fields (Figure 13), you need to make the initial setup of the application (paragraph 4.1.1 of this manual).

To edit the certificate, select the desired document in the list (Figure 12) and click "Edit", then you can change the document and save the updated document by clicking "Save".

To delete a certificate, you need to select the desired document in the list (Figure 12) and click "Delete".

To save (print) the document according to the form of the technical code, you need to select the desired certificate in the list (Figure 12) and click "Export to Word". After successful saving you will see the notification (Figure 14). You can find the saved file in the following way: "*folder with the installed application / Exported documents / folder with the name of the required document type*".

Акт успешно с	генерирован	

Figure 14 – Notification of successful saving in Word

4.1.3 "Certificates of technical acceptance of works in the transplant section (E)"

The tab is intended for work with the certificates generated according to appendix E of the technical code. After clicking on this menu item, a window will appear with a list of the existing data (Figure 15).



Figure 15 – Working with certificates

To create a new certificate, click on the "Create" button and then a window for creating a document will open (Figure 16), where you should fill out the fields.

	н 15.12.2020 15					
Лы, член іроизвел	ны комиссии	пито	мнике,			
	леснич	ества	лесхоза	06	ласти, при этом обн	аружено:
бавить	строку					
Nº	Порода	Поле севооборота	Качество обработки почвы	Время посадки	Площадь в га (0,01 га)	Способ и вид посева
0		0		15.12.2020 1	5 0	
		<i>n </i>				2
аключе	ние комиссии			-		
Inencen	атель комиссии				(ΦNO)	
Іредседа Ілены ко	омиссии	(должн	ость)			
Іредседа Ілены ко	омиссии	(должн (должно)	сть)]	(ФИО)	
Іредседа	эмиссии	(должно (должно) (должно)	сть)		(ΦΝΟ) (ΦΝΟ)	

After filling out all the fields, click the "Save" button.

Note: To automatically fill out the data of the head and members of the commission (Figure 16), you need to make the initial setup of the application (paragraph 4.1.1 of this manual).

To edit a certificate, select the desired document in the list (Figure 15) and click "Edit", then you can change the document and save the updated document by clicking "Save".

To delete a certificate, you need to select the desired document in the list (Figure 15) and click "Delete".

To save (print) the document according to the form of the technical code, you need to select the desired certificate in the list (Figure 15) and click "Export to Word". After successful saving you will see the notification (Figure 17). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

	>
Акт успешно	о сгенерирован

Figure 17 – Notification of successful saving in Word

4.1.4 "Certificates for writing-off the dead crops, transplant sections and plantations in nurseries

(Γ)"

The tab is intended for work with writing-off certificates. After clicking on this menu item, a window will appear with a list of the existing data (Figure 18).



To create a new certificate, click on the "Create" button and then a window for creating a document will open (Figures 19-20), where you should fill out the fields.

оставлен	13.12.2020	2		1	I
Иы, члень	комиссии		лесхоз	a	гплхо
			(должность, Фами.	пия И.О.)	
оставили	настоящий акт о т	ом, что при обсле	довании погибших п	осевов (школ, плантаци	ıй) в
питомнике	• [ле	сничества обнаружен	ю следующее:	
обавить ст	гроку				
№№ полевых карточек	Площадь погибших посевов, школ и плантаций, га	Год, число посева (посадки)	% сохранившихся сеянцев, здоровых семян	% сохранившихся саженцев, черенков	Причины гибели
	0	15.12.2020 15	0	0	
č (3
I. Посевно	е отделение				
Лтого:					
2. Школьн	ое отделение				
Лтого:					
Заключен	ие комиссии				
Председат	ель комиссии				(110)
		(д	(олжность)		(ΦNO)

Figure 19 – Creating a certificate
добавить с	троку				
№№ полевых карточек	Площадь погибших посевов, школ и плантаций, га	Год, число посева (посадки)	% сохранившихся сеянцев, здоровых семян	% сохранившихся саженцев, черенков	Причины гибели
	0	15.12.2020 15	0	0	
63					3
1. Посевн	ое отделение				
MTOTO:					
more.					
2. Школьн	ое отделение				
2. Школьн Итого: [ое отделение				
2. Школьн Итого: [Заключен	ое отделение ие комиссии				
2. Школьн Итого: [Заключен	ие комиссии				
2. Школьн Итого: [Заключен Председа	ое отделение ие комиссии				
2. Школьн Итого: [Заключен Председа	ое отделение	(д	(олжность)		(ΦNO)
2. Школьн Итого: [Заключен Председа Члены ког	ое отделение ие комиссии тель комиссии	(A	олжность)		(ΦΝΟ)
2. Школьн Итого: [Заключен Председа Члены ког	ое отделение ие комиссии тель комиссии	(д	(олжность)		(ΦΝΟ)
2. Школьн Итого: [Заключен Председа Члены ког	юе отделение ие комиссии гель комиссии	(д (до	(олжность) лжность)		(ΦΝΟ)
2. Школьн Итого: Заключен Председа Члены ког	ое отделение ие комиссии гель комиссии	(д (до	олжность) лжность)		(ΦΝΟ)
2. Школьн Итого: [Заключен Председа Члены ко	ое отделение ие комиссии гель комиссии миссии	(д (до (до	олжность) лжность) лжность)		(ΦИΟ) (ΦИΟ)
2. Школьн Итого: [Заключен Председа Члены ког	юе отделение	(Α (Αο (Αο	олжность) лжность) лжность)		(ΦΝΟ) (ΦΝΟ)

Figure 20 – Creating a certificate

After filling out all the fields, click the "Save" button.

Note: To automatically fill out the data of the head and members of the commission (Figure 20), you need to make the initial setup of the application (paragraph 4.1.1 of this manual).

To edit a certificate, select the desired document in the list (Figure 18) and click "Edit", then you can change the document and save the updated document by clicking "Save".

To delete a certificate, you need to select the desired document in the list (Figure 18) and click "Delete".

To save (print) the document according to the form of the technical code, you need to select the desired certificate in the list (Figure 18) and click "Export to Word". After successful saving you will see the notification (Figure 21). You can find the saved file in the following way: "*folder with the installed application / Exported documents / folder with the name of the required document type*".

	8
Акт успешно	сгенерирован
Акт успешно	сгенерирован

Figure 21 - Notification of successful saving in Word

4.1.5 "Data on technical acceptance of works in the sowing sections of nurseries (Ж)"

The tab is intended for work with the document "Information on technical acceptance of works in sowing sections". After clicking on this menu item, a window will appear with a list of the existing data (Figure 22).



Figure 22 – Working with documents

To create a new sheet, click on the "Create" button, and the window for creating a document will open (Figure 23), where you have to specify the period for which the document will be created.

		P (108046)	
Выберите период,	за который необ	ходимо создать сводну	о ведомость:
	v	v	
	(время года)	(год)	

Next, click "Select" and then download the information from all certificates and acts for the selected period (Figure 24). In this form it is necessary to enter manually a quality class, selection value of seeds, a condition of crops and the reasons of death. You have to manually fill out all other fields outside the table on the form.

осень 2020 года					
Наименование орга	низации, предост	авляющей отчёт	ность		
Эбщая площадь пос	севного отделения	а 0 га, прод	уцирующая площадь	0 га, пар	овые поля 0 га
Время посева: меся	ц, дата начала и о	кончания работ:			
	Плошадь	Способ и	Норма высева	Класс качества	Высеяно семян на
Порода	в га (0,01 га)	вид посева	семян в г на 1 пог.м.	(фактически)	1 га, кг (фактически)
<					>
		(подпись)	(Φa	милия И.О.)	
Рамилия исполните	ля		номер телефона		
Рамилия исполните	ля	(номер телефона		
амилия исполните ата составления от	ля	15	номер телефона		
амилия исполните	ля	15	номер телефона		
амилия исполните ата составления от	ля ччёта 15.12.2020	15	номер телефона		
амилия исполните ата составления оп	ля тчёта 15.12.2020	15	номер телефона		
Фамилия исполните Цата составления от	ля гчёта 15.12.2020	15	номер телефона		
Фамилия исполните Дата составления от	ля	15	номер телефона		

Figure 24 - Creating a consolidated sheet

After filling out all the fields, click the "Save" button.

To edit the consolidated sheet, select the desired document in the list (Figure 22) and click the "Edit" button, then you can change the data and save the updated document by clicking the "Save" button. To delete a sheet, you need to select the desired document in the list (Figure 22) and click "Delete".

To save (print) a document according to the form of the technical code it is necessary to select the desired document in the list (Figure 22) and click "Export to a Word". After successful saving you will see the notification (Figure 25). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

, an yenemin	о степерирован
	10000

X

Figure 25 - Notification of successful saving in Word

4.1.6 "Data on technical acceptance of works in the transplant sections of nurseries (K)"

The tab is intended for work with the document "Data on technical acceptance of works in the transplant sections". After clicking on this menu item, a window will appear with a list of the existing data (Figure 26).



Figure 26 – Working with documents

To create a new statement, you have to click on the "Create" button, and a window for creating the document will open (Figure 27), where you should specify the period for which the document will be created.

Co	эздание свод	ной ведомости	
Выберите период, за	который необ	ходимо создать сво	одную ведомость:
	~	~	
	(время года)	(год)	
Выбрать		Отме	нить

Figure 27 – Selecting boot period

Next, click "Select" and download the data from all certificates and acts for the selected period (Figure 28). In this form, you have to manually fill out the fields outside the table on the form.

аименование орган	низации, предостав	зляющей отчётность		
Порода	Продуцирующая площадь 0,01 га	Количество высаженных растений на 1 га, тыс. шт.	Количество высаженных растений на всей площади, тыс. шт.	Посадочный материал (сеянцы, черенки, приви- тые саженцы, возраст)
¢	1			>
			12	
уководитель органи	изации	(подпись)	(Фамилия И.О.)	
			10 10 10 10 10 10 10 10 10 10 10 10 10 1	
Рамилия исполнител	ля	HON	ер телефона	
Рамилия исполнител	ия	HON	ер телефона	
Фамилия исполните. Laта составления от	ия чёта 15.12.2020 <mark>1</mark>	HON	ер телефона	
Фамилия исполните. Цата составления от	чёта 15.12.2020 1	HOM	ер телефона	
Дамилия исполните,	ия	HOM	ер телефона	

Figure 28 – Creating a consolidated sheet (statement)

After filling out all the fields, click the "Save" button.

To edit the consolidated sheet, select the desired document in the list (Figure 26) and click the "Edit" button, then you can change the data and save the updated document by clicking the "Save" button. To delete a sheet, select the desired document in the list (Figure 26) and click the "Delete" button.

To save (print) a document according to the form of the technical code it is necessary to select the desired document in the list (Figure 26) and click "Export to a Word". After successful saving you will see the notification (Figure 29). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

Акт успешн	о сгенерирован

Figure 29 - Notification of successful saving in Word

4.1.7 "Field inventory cards of seedlings, saplings and shortened cuttings (Π) "

The tab is designed to work with field inventory cards. After clicking on this menu item, a window will appear with a list of the existing documents (Figure 30).



Figure 30 – Working with field cards

To create a new card, click on the "Create" button, and a window for creating the document will open (Figure 31, Figure 32), where you have to fill out the fields.

	ции сеянцев, саженцев и укоре	нённых черенков в 0 году	· · · · · · · · · · · · · · · · · · ·	
1.Лесхоз	2.Лесниче	ество 3.П	итомник 4.Квартал С	0
5.Грунт	6.Порода	7.Год закладки (по	сева) 0	
8.Вид посадоч	чного (семенного) материала		9.Площадь участка 0 га	
10.Схема посе	ева, размещения саженцев	11.Количество лент	r, строк, рядов 0 шт.	
12.Средняя д	лина строки, ряда 0 м 1	3.Общая длина лент, строк, рядов	0 м	
14.Количеств	о высаженных саженцев на 1 г	а 0 шт. 15 Лаина учётн	ого отрезка 0 пог. м или плошаль учётной	
			пол мили площада учетной	
площадки 🔄	м. кв. То.Результаты пер	есчета в натуре:		
	добавить строку			
		Количество сеянцев (саженцев)	Количество сеянцев (саженцев)	
	№ п.п. учетного отрезка	на учётном отрезке (всего)	на учётном отрезке (в т.ч. годных к посадке)	
			te construction of the set of the	
	0	0	0	
	0	0	0	
	0	0	0	
17.Среднее ко	0	0		
17.Среднее ка	0	0 на 1 пог. м по пересчёту 0 шт	0	
17.Среднее кол 18.Общее кол	0. Соличество сеянцев (саженцев) ничество сеянцев (саженцев) н	0 на 1 пог. м по пересчёту 0 шт а всей площади участка 0 тыс	0 , в т.ч. стандартных 0 , шт., в т.ч. стандартных 0	

Figure 31 – Creating a field card

4.KONNAECIBO B	ысаженных саженцев на 1 г	ашт. Тэ.Длина учетн	ого отрезка 🔜 пог. м или площадь учетн	ION
пощадки 0	м. кв. 16.Результаты пер	есчёта в натуре:		
	добавить строку			
	№ п.п. учётного отрезка	Количество сеянцев (саженцев) на учётном отрезке (всего)	Количество сеянцев (саженцев) на учётном отрезке (в т.ч. годных к посадке)	
	0	0	0	
	1		0	
7.Среднее коли 8.Общее колич 9.Заключение и лены комиссии	ичество сеянцев (саженцев) нество сеянцев (саженцев) на комиссии	на 1 пог. м по пересчёту 0 ш [.] а всей площади участка 0 тыс	г., в т.ч. стандартных 0	
7.Среднее коли 8.Общее колич 9.Заключение и Ілены комиссии	ичество сеянцев (саженцев) н ество сеянцев (саженцев) н комиссии и	на 1 пог. м по пересчёту 0 ш а всей площади участка 0 тык (должность)	г., в т.ч. стандартных 0 с. шт., в т.ч. стандартных 0 (ФИО)	
7.Среднее коли 8.Общее колич 9.Заключение и Ілены комиссии	ичество сеянцев (саженцев) н чество сеянцев (саженцев) н комиссии и	на 1 пог. м по пересчёту 0 ш а всей площади участка 0 тыс (должность)	г., в т.ч. стандартных 0 с. шт., в т.ч. стандартных 0 (ФИО)	
7.Среднее коли 8.Общее колич 9.Заключение и Ілены комиссии	ичество сеянцев (саженцев) н комиссии « (на 1 пог. м по пересчёту 0 ш а всей площади участка 0 тык (должность) (должность)	г., в т.ч. стандартных 0 с. шт., в т.ч. стандартных 0 (ФИО) (ФИО)	
7.Среднее колич 18.Общее колич 19.Заключение і Ілены комиссий 15.12.2020.	ичество сеянцев (саженцев) н нество сеянцев (саженцев) н комиссии	на 1 пог. м по пересчёту 0 ш а всей площади участка 0 тыс (должность) (должность) (должность)	г., в т.ч. стандартных 0 с. шт., в т.ч. стандартных 0 (ФИО) (ФИО) (ФИО)	

Figure 32 – Creating a field card

After filling out all the fields, click the "Save" button.

Note: To automatically fill out the data of the head and members of the commission (Figure 32), you need to make the initial setup of the application (paragraph 4.1.1 of this manual).

To edit a card, select the desired document in the list (Figure 30) and click "Edit", then you can change the data and save the updated document by clicking "Save".

To delete a field card, select the desired document in the list (Figure 30) and click the "Delete" button.

To save (print) a document according to the form of the technical code it is necessary to select the desired document in the list (Figure 30) and click "Export to a Word". After successful saving you will

see the notification (Figure 33). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

AKT	гуспешно	о сгенерирован	н
1 444	1. 2 . 100 (100 (100 (100 (100 (100 (100 (100	Construction of the state of th	
7.001	,		

Figure 33 - Notification of successful saving in Word

4.1.8 "Reports on available planting material in nurseries, transplant sections and plantations (M)"

The tab is designed for working with reports. After clicking on this menu item, a window will appear with a list of the existing documents (Figure 34).



Figure 34 – Working with reports

To create a report, you should click on the "Create" button opening a window for creating a document (Figure 35), where it is necessary to fill out the fields.

Порода	Код породы	Сеянцы однолетние всего, га	Сеянцы однолетние всего, тыс. шт.	Сеянцы однолетние стандартные, тыс.шт	Сеянцы двух лет и старше всего, га	Сеянцы двух лет и старше всего, тыс.шт	Сеянцы двух лет и старше стандартные тыс.шт	Сажень укоренё черен всего
		0	0	0	0	0	0	0
		(nog	цпись)		(Фамили	я И.О.)		
илия исполните	пя			номер теле	фона			
	чёта 15.12.2	2020	5					
составления от								

Figure 35 – Creating a report

After filling out all the fields, click the "Save" button.

To edit a report, select the desired document in the list (Figure 34) and click "Edit", then you can change the data and save the updated document by clicking "Save".

To delete a report, select the desired document in the list (Figure 34) and click the "Delete" button.

To save (print) a document according to the form of the technical code it is necessary to select the desired document in the list (Figure 34) and click "Export to a Word". After successful saving you will see the notification (Figure 36). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

Акт у	спешн	о сгене	ерирован	н

Figure 36 - Notification of successful saving in Word

4.1.9 "Consolidated sheets of standard seedlings and shortened cuttings by years in transplant sections (H)"

The tab is intended for work with documents "Consolidated sheets by years". After clicking on this menu item, a window will appear with a list of the existing documents (Figure 37).



Figure 37 – Working with statements

To create a report, you should click on the "Create" button opening a window for creating a document (Figure 38), where it is necessary to fill out the fields.

обавить стр	ооку											
Код	Порода	Всего тыс.шт.	1 год в школе	2 года в школе	3 года в школе	4 года в школе	5 лет в школе	6 лет в школе	7 лет в школе	8 лет в школе	9 лет в школе	10 и лет
1		0	0	0	0	0	0	0	0	0	0	
уководите	ль организации	-	(подпис	ь)			(Фамилі	ия И.О.)				

Figure 38 - Creating a consolidated statement

After filling out all the fields, click the "Save" button.

To edit a sheet, select the desired document in the list (Figure 38) and click the "Edit" button, then you can change the data and save the updated document by clicking the "Save" button.

To delete a sheet, select the desired document in the list (Figure 37) and click the "Delete" button.

To save (print) a document according to the form of the technical code it is necessary to select the desired document in the list (Figure 37) and click "Export to a Word". After successful saving you will see the notification (Figure 39). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

-
OK

X

Figure 39 - Notification of successful saving in Word

4.1.10 Calculation of monthly efficiency

The tab is intended for entering data on the activities in a nursery carried out monthly. After clicking on this menu item, a window will appear with a list of the existing documents (Figure 40).



Figure 40 – Working with documents

To create a document, click on the "Create" button opening the window for creating the document (Figure 41), where you need to fill out the fields.

есхоз	Месяц	v Год	0	
ощадь постоянного л	есного питомника (всего),	га 0 , в т.ч.	продуцирующая	0
Расходы на функцион	ирование питомника, тыс.	руб. :		
а саженцы 0]			
а приобретение посе	вного и посадочного мате	риала для нужд лесхоз	а (лесхозов отрасли)	0
а приобретение посе	вного и посадочного мате	риала для нужд лесхоз	а (сторонних организац	ий) 0
а сеянцы 0				
а выкопку 0]			
а материальные отчё	гы 0			
оугие расходы 0				
ero O				
Доходы питомника, т	ыс.руб :			
т реализации посадоч	ного материала лесхозам	отрасли 0		
т реализации посадоч	ного материала сторонни	м организациям	0	
т оказания платных ус	слуг О			
т реализации лекарст	венного сырья плодов-яго	дит.д. О		
виде стоимости посе	вного и посадочного мате	риала, полученного на	безвозмездной оснве	0
ругие доходы, в том ч	исле за семена 0			
ero 0				
ланс лоходы-расходь	питомника +/- тыс. р	y6. 0		

Figure 41 – Creating a monthly report

After filling out all the fields, click the "Save" button.

To edit, select the desired document in the list (Figure 40) and click "Edit", then you can change the data and save the updated document by clicking "Save".

To delete, select the desired document in the list (Figure 40) and click "Delete".

To save (print) a document according to the form of the technical code it is necessary to select the desired document in the list (Figure 40) and click "Export to a Word". After successful saving you see the notification (Figure 42). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

Акт успеш	но сгенерирован

Figure 42 - Notification of successful saving in Word

4.1.11 Calculation of annual efficiency

4.1.11.1 Calculation of annual efficiency (for a forestry)

The tab is designed to generate annual economic efficiency. After clicking on this menu item, a window will appear with a list of the existing documents (Figure 43).



Figure 43 – Working with documents

To create a document, you have to click on the button "Create" opening the window for creating the document (Figure 44), where you should fill out the fields and select the reporting year.

Эффективность за год
Выберите год, за который необходимо посчитать эффективность:
Укажите годовые расходы на выращивание посадочного материала, реализованного сторонним организациям 0
Укажите годовые расходы на выращивание посадочного материала, переданного на безвозмездной основе сторонним организациям 0
Соуранить

Figure 44 – Creating a consolidated statement

After filling out all the fields, click the "Save" button.

To edit, select the desired document in the list (Figure 43) and click "Edit", then you can change the data and save the updated document by clicking "Save".

To delete, select the desired document in the list (Figure 43) and click "Delete".

To save (print) a document according to the form of the technical code it is necessary to select the desired document in the list (Figure 43) and click "Export to a Word". After successful saving you will see the notification (Figure 45). You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

X

Figure 45 – Notification of successful saving in Word

To upload a document from a forestry in an SFPA or an SPFA of the Ministry of Forestry you have to click "Export to Json" (Figure 43).

4.1.11.2 Calculation of annual efficiency (for an SPFA and the Ministry of Forestry)

To generate a consolidation report for an SPFA and the Ministry of Forestry, press $\langle \Sigma \rangle$ on the form (Figure 43), after which the respective window will open (Figure 46).

Lington 11/2	and the second second	IN LANDARD STAT
Создать общи	о головую эффе	TUBHOCTH & Word
Cosdarb oody		KINDHOCTB B WORD
Загрузить годо	вую эффективно	сть лесхоза в базу
· · · · · · · · · · · · · · · · · · ·		

Figure 46 – Generating a consolidated report

To create a consolidated report, click the "Create total annual efficiency in Word" button. Next, choose the year for generating a consolidated sheet (Figure 47) and click "Select". You can find the saved file in the following way: "folder with the installed application / Exported documents / folder with the name of the required document type".

To download data from the forestry, it is necessary to press the button "Upload the annual efficiency of the forestry in the base" and then select json-file for downloading.



Figure 47 – Selecting a reporting year

5 ALARM SITUATIONS

If an alarm situation occurs while the data aggregation software module is running, a corresponding message box is displayed on the monitor.

In the event of an alarm situation, the user should take a screenshot of the error message and send information about the alarm to the software developer by email at support@belgosles.by, or by submitting an application in the section "Technical support" on the website of the RUE "Belgosles" to identify and eliminate the causes of its occurrence.

6 RECOMMENDATIONS HOW TO USE

The AWS-N technical support should include means of protection against power failures.

The functioning of the AWS-N hardware should be carried out with standard preventive maintenance.

To protect the AWS-N from computer viruses that interfere in the functioning of software and harm information, antivirus protection packages should be installed on computers.

User Manual

Automated Workstation "Seed Production of Forest Plants"

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ABREVIATIONS AND ACRONYMS

AWS	automated workstation;
AWS-S	AWS "Seed production of forest plants";
SP	software product;
DB	database with the minimized redundancy (repeatability) of data, where all data are stored in a logically linked form;
PFSB	permanent forest seed base;
FSP	forest seed plantation;
PFSP	permanent forest seed plot;
FARSP	farming seed planting;

1 INTRODUCTION

1.1 Scope of application

The AWS application "Seed production of forest plants" is intended for use in the system of the Ministry of Forestry of the Republic of Belarus, in particular by legal entities involved in forestry.

1.2 Description of functions

The AWS performs the following processes:

- preparation and storage of documents, consolidated sheets and reports related to seed production of forest plants and nursery management and accounting;
- export of the necessary information to print out.

1.3 The required level of users

The users of the AWS-S are employees of forestry enterprises and forestries related to seed production and nursery management.

When recruiting staff for using this SP, preference should be given to specialists having skills in working with information systems.

Qualifications of the SP users are as follows:

- computer literacy at the level of a PC user;
- skills in working with basic office applications: Microsoft Word, Microsoft Excel;
- skills in working with files and file storages of the Microsoft Windows operating system.

1.4 List of operating documentation for the user

The SP user should read the User Manual and the description of the AWS-S system.

2 GOALS AND TERMS OF USE

2.1 Objectives of the AWS "Seed production of forest plants"

- monitoring and control of forest plant seed production, treatment of forest plant seeds at all stages, use of collected seeds, operation of the existing seed plantations, etc.;
- determination of the actual cost of works on seed production;
- storage and control of documentation related to seed production;
- generation of consolidated and reporting documents.

2.2 Terms of application

To use this SP, the following software is required:

- operating system MS Windows 7 +;
- MS Excel Office 2007 +;
- MS Word Office 2007 +;
- GisLes application (optional).

Maintenance of the automated control system should be carried out by the MICS engineers.

Users should ensure input of primary documentation.

3 PREPARATION OF OPERATIONS

3.1 Setup of the AWS "Seed production of forest plants"

To download the AWS-S, you have to download the installer from the ftp-server of the RUE "Belgosles" at ftp.belgosles.by\!EXE\Seedproduction.

3.2 Unpacking the installation files

To install, you should run the installer file "Seedproduction.exe". In the process, you also need to specify the path of installation of the application (any convenient place on your personal computer). For the software to operate, you need to download and install <u>.NetCore 3.1</u> and <u>PostgreSQL</u>.

3.2.1 NetCore 3.1 installation

Follow the <u>link;</u> Select the version of the package suitable for your computer and click on it (Figure 1).



Figure 1 – Selecting the package version

After downloading, open the installer file. A sample image and default name is shown in Figure 2.

windowsdesktop-runtime-3.1.10-win-x64

Figure 2 – Sample image and default name of the file

In the window that appears (if there is one) shown in Figure 3, click "Run".



Figure 3 – Confirming the setup of the installer

After starting, accept all the conditions of the installer and wait for the completion of the installation of the component.

3.2.2 Postgre SQL installation

Run the installer file (sample image and name are shown in Figure 4).

Имя	Дата изменения	Тип	Размер
postgresql-12.5-1-windows-x64	15.12.2020 21:49	Приложение	206 372 KB

Figure 4 – Sample image and default name of the file

If a window appears (Figure 5), confirm the start of the installation by clicking the "Start" button.

Открыть	файл - преду	преждение системь	ы безопасности	×
Вы хот	ите запустит	ь этот <mark>ф</mark> айл?		
	Имя:	etup\Семеново	аство\postgresql-12.5	i-1 <mark>-</mark> windows-x64.exe
	Издатель:	EnterpriseDB Cor	poration	
	Тип:	Приложение		
	Из:	D:\Setup\Семенов	водство\postgresql-1	2.5-1-windows-xб
			Запустить	Отмена
Bcer	да спрашиват	ть при открытии это	ого файла	
	Файлы из И повредить полученны	1нтернета могут бы компьютер. Запуск е от доверяемого и	ть полезны, но этот айте только програм іздателя. Факторы рі	тип файла может имы, иска

Figure 5 – Confirmation of installation

In the window that appears (Figure 6) and the following windows select the "Next" button.



Figure 6 – Selecting the package for installation

If necessary, change the installation path in the next window (Figure 7).



Figure 7 – Changing the path to install

In a window with password entry (Figure 8), indicate the password twice and remember it. Then it will be necessary to insert it in the software (point 4.1.1.2 of this manual).

<table-of-contents> Setup</table-of-contents>					□ ×
Password					
Please provide a p	assword for the dat	abase superuser (po	stgres).		
Password	•••••				
Retype password					
Mware InstallBuilder			a	92	NG
			< Back	Next >	Cancel

Figure 8 – Password for connecting with the database

After successful installation, the window shown in Figure 9 will appear.



Figure 9 – Confirming the successful installation

3.3 Database creation

The software database is automatically created when the application is first started.

4 DESCRIPTION OF OPERATIONS

4.1 Description of the menu items

Having launched the AWS-S application, you have to select the appropriate item in the main menu of the software (Figure 10). The composition of the main menu is shown in Table 1.

АРМ "Семеноводоство лесных рас	тений"
Документы на сырьё/семена	
Документы ПЛСБ	
Сводные ведомости инвентаризац	ции
Книга учета лесных семян	
Справочники	
Сервис	
Помощь	
Техническая поддержка РУП "Белг	ослес"
	¢
Выход	

Figure 10 – Main menu of the software

Table 1 –	Comp	osition	of the	software	main	menu

Main menu item	Submenu item
	Passport for a batch of materials / cones
Documents on materials	Passport for a batch of materials / wings
/ seeds	Passport for a batch of seeds
	Certificate of quality of forest plant seeds
	Passport of a forest seed plantation
	Passport of a plus forest stand
PFSB documents	Passport of a plus tree
	Passport of a permanent forest seed plot
	Consolidated sheet of farming seed plantations
	Passport of a forest genetic reserve
Consolidated inventories	FSO (forest seed orchard)

Main menu item	Submenu item
	PFSB (permanent forest seed base)
	PT (plus tree)
	PFSP (permanent forest seed plots)
	FSP (farming seed plantations)
	FGR (forest genetic reserves)
	Accounting for forest seeds harvested by an enterprise in its forestry
Record book of forest seeds	Accounting for forest seeds purchased by an enterprise in other forestries
	Without division by an enterprise where the seeds are harvested
	Species directory
Directories	Directory of organizations
	Districts
	Forest type
Service	Initial application setup
	Configuration settings for connection to the database
	User manual
Help	History
	About the software
Technical support of the RUE "Belgosles"	Go to filling out the Application form
Brightness (transparency) control	

4.1.1 Service

The tab is used to initially configure the application (save some data used when filling out the fields of documents automatically) and configure the connection to the database (save the password to access the data). After clicking on this tab, you will see a drop-down list containing the submenu (Figure 11).

документы на сырье/сем	ена
Документы ПЛСБ	
Сводные ведомости инве	нтаризации
Книга учета лесных семя	H
Справочники	
Сервис	
Первичная настройка приложения	
Настройка подключения к БД	Белгослес

Figure11 – "Service" submenu items

4.1.1.1 Initial application setup

After selecting this menu item, an information window will open (Figure 12) with the "Go to settings" and "Exit" buttons.

	Сейчас будет произведена
	предварительная настройка приложения
П	ожалуйста, заполните предлагаемую форму
для	а того чтобы настройки сохранились в файле
	StartupSettings.json
	и в последующем загружались бы из него
	а не вводились каждый раз заново
	Перейти к настройке Выйти

Figure 12 – Initial application setup window

To fill out the data, you need to click on the "Go to settings" button, and a window will open (Figure 13) where you need to fill out the required fields.

-
ыбрать структурное подразделение 🗸 🗸
Выбрать район 🗸 🗸
OM
акс
Мя Отчетсво
ITOB

Figure 13 – Window for filling out the data

To confirm saving of the entered data it is necessary to press the Save button, for cancellation it is necessary to press the Exit button.

4.1.1.2 Connection with DB setup

After selecting this menu item, a form will open (Figure 14) where you need to fill out the password to connect to the database, which was specified when installing PostgreSQL.

Ha	астройка подключения к БД	
Хост	localhost	
Порт	5432	
База данных	SeedProductionDb	
Пользователь	postgres	
Пароль		Показать пароль
C	Сохранить Выйти	
	Сохранить	

Figure 14 - Window of configuration of connection to the database

To save the data, click the "Save" button. To cancel click "Exit".

4.1.2 "Documents for material/ seeds"

The tab is designed to work with passports for a batch of cones, wings, seeds as well as a certificate of quality of seeds of forest plants. After clicking on this tab, you will see a drop-down list containing the submenu (Figure 15).



Figure 15 – Documents for material/ seeds submenu items

4.1.2.1 Passport for a batch of material/ cones

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 16).

		Паспорт на партик	ы титек		
ок паспортов			Ответственный за (составление	
Номер Дата создания	Организация	Должность	Фамилия	Имя	Отчество
		Добавить пасп	орт		
		Удалить паспо	рт		
		Редактировать па	аспорт		
		Reivon			

Figure 16 – Form of the list of documents "Passport for a batch of cones"

To create a new passport, click on the "Add Passport" button opening a window for creating the document (Figure 17), where you need to fill out the fields.

Составлен Выбор д	аты 15	ПАСПОРТ № С	^
	вид	довое наименование на русском и латинском языках	
	AM	•	
1. Данная партия заготов	лена	v	
	наимен	нование юридического лица, ведущего лесное хозяйство	
2. Время сбора	Выбор даты 15	Выбор даты 15	
	Начальная дата	Конечная дата	
3. Место сбора	~		
структур	ное подразделение юридичес	ского лица	
	Лесной квартал	Таксасционный выдел	
Лесосеменной объект, в ко	тором заготовлено лесосемен	нное сырье	
	объект і	постояннои лесосеменнои базы	
T (×		
Тип объекта ПЛСЬ	/ № паспорта	Іод создания (отбора) Іілощадь, га	
4. Таксационная характер	истика лесных насаждении:	бонитет	
COCIDB		oonvier v	
группа возраста	v 1	тип леса 🗸 🗸	

After filling put all the fields, click the "Save in DB" button.

Note: For automatic filling of the underlined fields (Figure 18) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).



Figure 18 – Field for automatic filling out

To edit a passport it is necessary to select the desired passport in the list (Figure 16) and click the "Edit passport", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a passport, select the desired passport in the list (Figure 16) and click the "Delete passport" button.

4.1.2.2 Passport for a batch of material/wings

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 19).

паспортов Ответственный за составление	Ответственный за составление ия Должность Фамилия Имя Отчество УП dfv dfv dfv dfv				Паспорт на партию	крылаток		
Ответственный за составление	Ответственный за составление ия Должность Фамилия Имя Отчество УП dfv dfv dfv dfv	паспор	отов					
	ия Должность Фамилия Имя Отчество УП dfv dfv dfv dfv dfv					Ответственный за с	составление	
юмер Дата создания Организация Должность Фамилия Имя От	YTI dfv dfv dfv dfv	омер	Дата создания	Организация	Должность	Фамилия	Имя	Отчество
54 09.09.2020 Белгослес РУП dfv dfv dfv		54	09.09.2020	Белгослес РУП	dfv	dfv	dfv	dfv
					Удалить паспо	орт		
Удалить паспорт	Удалить паспорт				Редактировать па	аспорт		
Удалить паспорт Редактировать паспорт	Удалить паспорт Редактировать паспорт							
Удалить паспорт Редактировать паспорт	Удалить паспорт Редактировать паспорт				Выход			

Figure 19 – Form of the list of documents "Passport for a batch of wings"

To create a new passport, you need to click on the "Add passport" button, and the window for creating the document will open (Figure 20), where you need to fill out the fields. The underlined fields below are automatically filled out when you create a document.



Figure 20 – Form for creating a new passport for a batch of wings

After filling out all the fields, click the "Save in DB" button.

Note: For automatic filling of the underlined fields (Figure 21) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).

11. Лесосеменное сырье заго	товлено в счет плана работ		года	
		в целях		v
Dev	К	0	Т	
Должность	Фамилия	Имя	Отчетсво	
	ответстве	нного за составление паспорта		1.1

Figure 21 – Fields for automatic filling out

To edit a passport it is necessary to select the desired passport in the list (Figure 19) and click the "Edit passport", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a passport, select the desired passport in the list (Figure 19) and click the "Delete passport" button.

4.1.2.3 Passport for a batch of seeds

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 22).

		Паспорт на п	артию семян	1		
писок паспор	ртов					
	(1)		Ответст	венный за	состав.	ление
Номер	Дата создания	создания Организация	Должность	Фамилия	Имя	Отчество
	Добавить г	паспорт	Доба	вить удосто	верен	ие о качеств
	Удалить п	аспорт	Редакти	ровать удо	стовер	ение о качес
	Редактироват	ъ паспорт		B	ыход	

Figure 22 – Form of the list of documents "Passport for a batch of seeds"

To create a new passport, you need to click on the "Add Passport" button, and the information window will open (Figure 23), where you can create a completely new document or create a document based on a raw material passport.

Выбор	» источника для паспорта на семен
Сейча	ас вы перейдете к форме добавления паспорта.
1	В программе предусмотрена возможность
	создать полностью новый паспорт
	или же на базе паспорта на сырье.
Во	втором случае данные из паспорта на сырье
автомати	чески поступят в создаваемый паспорт на семен
	Пожалуйста, сделайте выш выбор

Figure 23 – Information window for creating a passport for seeds

When you create a new document, the window opens (Figure 24) and automatically fill out the underlined fields below.

Составлен		ПАСПО		мй			^
выбор	даты 15	na naprino cen	an sector poeren				
	видовое наименова	ние на русском и лати	нском языках				
		Абрикос маньч	журский / Prunus I	manosnunca			
массои	килограмм.						1.1.1
т. данная партия заготовле	на			Баранович	ский лесхоз		<u> </u>
2.10	наименова	ание юридического ли	ща, ведущего лесн	юге хозяйство			
2. Юридическии адрес орга	низации				Буда-Кошелевски	Й	
220220		Farrage		-	раион	60	
		ТЕЛУО	CKOE	Str	eet	09	
3. Электронный адрес орга	низации	111/1/10	Q	Janda	+375		-375
	-	•	e-mail		телеф	он	факс
4. Время сбора	Выбор даты				Выбор даты	5	
	Начальная	лата			Конеч	ная дата	
5. Место сбора		1	~				
		b					
		-	структ	урное подразд	еление юридичес	кого лица	
	Лесной квартал		Tarcac	шионный выле	20		
Лесосеменной объект, в кото	ром заготовлено лесосемення	ое сырье	Takebe	ционный выде	231		
	объект пос	стоянной лесосеменно	ой базы				
	~					0	
Turn of a sume DIRCE (A	10	Freedom	(076003)				

Figure 24 – Form for creating a new passport for seds

After filling out all the fields, click the "Save in DB" button.

		в целях		v
-				
Dev	К Фамилия	ОИмя	Отчетско	
Hermanoche	ответственног	о за составление паспорта		

Figure 25 – Fields for automatic filling out

When you create a document **on the basis of the passport for raw materials**, the window opens (Figure 26, Figure 27) and the underlined fields below are automatically filled out.

	Паспорт на парт	ию семян		
Составлен Выбор даты 15	ПАСПОРТ № на партию семян лесн	ых растений		^
Buildoboc Harm	Айлант высонайший	/ Ailanthus altissima	~	
массой	Айлант высочалший	/ Allentings altissing		
1. Ланная партия заготовлена	Березинский биосфер	ный заповедник		
2. Юридический адрес организации	ленование юридического лица, веду	Буда-Ко	целевский	
a ropidi icenii dipee opianisadini		буда ко	район	
220220	Гомельское	street	69	
почтовый индекс	гплхо	улица	дом	
3. Электронный адрес организации		@	+375 -375	
		e-mail	телефон факс	
4. Время сбора 02.09.2020	15	05.09.	2020 15	
Нача	альная дата		Конечная дата	
5. Место сбора	- (v)			
	Рожнян	ское лесничество		
		структурное подразделение н	оридического лица 💊	
dsv		sdc		
Лесной квартал		Таксасционный выдел		
Лесосеменной объект, в котором заготовлено лесосе	менное сырье			
C any many services and a	EKI TIOCTOSHHOU JECOCEMEHHOU 0836			
С других нормальных деревьев			Decurate to	
	год создания (отоора)		тлощадь, га	Y
Сохранить в БД	(Экспорт в MS	Word	Выход	

Паспорт на партию семян 6. Таксац актеристика лесных насаждений: бонитет состав sdcv группа возраста тип леса Болотно-папоротниковый средневозраст 7. Категория семя 8. Кем и когда проводилось предвар н лесных расте Им председателя комиссии Бегомльский лесхоз Oprai изация, где происходило извлече чальная да стеллажный 45-50 ния по извлечению семян с темература шишкосуши 10. Каким способом и с п ых пород способ обескрыливания механизмы обескрылива способ очистки механизмы очистки 11. Каким способом извлекались сем на лесных растений из сухих и соч IV DROBOR способом очищались сем способ извлечения способ очистки Сохранить в БД Экспорт в MS Word Выход

Figure 26 – Form for creating a passport based on the passport for material

Figure 27 - Form for creating a passport based on the passport for material

After filling out all the fields, click the "Save in DB" button.

Note: For automatic filling of the underlined fields (Figure 25) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).

To edit a passport it is necessary to select the desired passport in the list (Figure 22) and click the "Edit passport", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a passport, select the desired passport in the list (Figure 22) and click the "Delete passport" button.

4.1.2.4 Certificate of quality of forest plants seeds

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 28).

писок удостоверений					
			Ответственный за	составление	
Номер Дата создания	Организация	Должность	Фамилия	Имя	Отчество
		Редактировать удос Удалить удостов	товерение		

Figure 28 - Form of the list of documents "Certificate of quality of forest plant seeds"
To create a new certificate, click the button "Add certificate" opening an information window (Figure 29), which, when closed (click on the "Continue" button), should open a new window (Figure 30) to choose a passport for seeds, then click the "Add certificate of quality" opening a window (Figure 31, Figure 32), where you have to fill out the fields.

		- ···· - ···· - ···· - ····		ія удостов	ерени	1Я
	Для то	ого чтобы запол	нить удостов	зерение		
	ну	жно выбрать па	спорт на сем	лена		
		доступны	ый в БД			
	п	ожалуйста, сдел	айте ваш вы	бор		
	ИН	ажмите добави	ть удостовер	ение		
		Пролог	N/IITI	1		
		Продол	іжить			
	Figu	re 29 – Infor	mation w	indow		
	Ų					
		Паспорт на па	ртию семян			
ок паспол	отов	Паспорт на па	ртию семян			
ок паспор	ртов	Паспорт на па	ортию семян Ответсте	зенный за с	оставл	ение
ок паспор Номер	отов Дата создания	Паспорт на па Организация	ортию семян Ответств Должность	зенный за с Фамилия	оставл Имя	іение Отчество
ок паспор Номер 4	ртов Дата создания 09.12.2020	Паспорт на па Организация Барсуки ЭЛОХ	ответств Ответств Должность Dev	зенный за с Фамилия К	оставл Имя О	ение Отчества Т
ок паспор Номер 4	дата создания 09.12.2020 Добавить г	Паспорт на па Организация Барсуки ЭЛОХ паспорт	Ответств Ответств Должность Dev Добав	зенный за с Фамилия К ить удостог	оставл Имя О зерени	ение Отчество Т те о качес

Figure 30 – Selection of a passport for seeds

Выход

Редактировать паспорт



Figure 31 - Form for creating the document "Certificate of quality of forest plant seeds"

сок удостоверений				
2.1 видовое наим	менование	на русском	Абрикос ма	ньчжурский
		и латинском языках	Prunus ma	andshurica
2.2 возраст семя	н -5	дней		
2.3 дата акта отб	ора средне	ей пробы: Выбо	р даты 15	
2.4 номер	4	и дата паспорта партии	семян 00122	020
				.020. [13]
2.5 категория сем	COMUNICACIÓN DE LA COMUNICACIÓN	тенетически улучшенные	15 15	
2.7 время сбора	10 10 000		02.42.5	000
сл время соора	10.12.202	15	02.12.2	15
20	1	Начальная дата	K	онечная дата
2.8 место сбора	10)	10	
Лесосеменной об	Лесной кв ъект, в кото	артал ором заготовлено лесосе» объект постоянной лесосе	Таксасционный вы менное сырье аменной базы	дел
Лесосеменной об	Лесной кв ъект, в кото о	артал ором заготовлено лесосек объект постоянной лесосе объект постоянной лесосе Год создания (от	Таксасционный вы менное сырье еменной базы бора)	ідел Площадь, га
Лесосеменной об № паспорта 2.9 Место хранен	Лесной кв ъект, в кото а а ния семян	артал эром заготовлено лесосем объект постоянной лесосе Год создания (от в холоди	Таксасционный вы менное сырье еменной базы бора) ильной камере	ідел Площадь, га
Лесосеменной об № паспорта 2.9 Место хранен Вид тары	Лесной кв ъект, в кото о а ния семян другая	артал эром заготовлено лесосею объект постоянной лесосе Год создания (от в холоди	Таксасционный вы менное сырье аменной базы бора) ильной камере	идел Площадь, га
Лесосеменной об № паспорта 2.9 Место хранен Вид тары Число мест тары	Лесной кв ъект, в кото о ия семян другая 10	артал эром заготовлено лесосек объект постоянной лесосе Год создания (от в холоди	Таксасционный вы менное сырье еменной базы бора) ильной камере	ідел Площадь, га
Лесосеменной об № паспорта 2.9 Место хранен Вид тары Число мест тары 3. Организация	Лесной кв ъект, в кото а иия семян другая 10 поставщи	артал ором заготовлено лесосем объект постоянной лесосе Год создания (от в холоди ик Е	Таксасционный вы менное сырье еменной базы бора) ильной камере арановичский лесс	идел Площадь, га
Лесосеменной об № паспорта 2.9 Место хранен Вид тары Число мест тары 3. Организация 4. Назначение с	Лесной кв ъект, в кото иля семян другая 10 поставщи семян лес	артал ором заготовлено лесосем объект постоянной лесосе Год создания (от в холоди ик Е ного растения	Таксасционный вы менное сырье еменной базы бора) ильной камере арановичский лесс дру	идел Площадь, га коз
Лесосеменной об № паспорта 2.9 Место хранен Вид тары Число мест тары 3. Организация 4. Назначение с 5. Класс качесте	Лесной кв ъект, в кото иия семян другая 10 поставщи семян лест ва семян	артал ором заготовлено лесосем объект постоянной лесосе Год создания (от в холоди ик Е ного растения	Таксасционный вы менное сырье еменной базы бора) изьной камере арановичский лесс дру	идел Площадь, га коз
Лесосеменной об № паспортт 2.9 Место хранен Вид тары Число мест тары 3. Организация 4. Назначение с 5. Класс качесте	Лесной кв ъект, в кото ия семян другая 10 поставщи семян лесс ва семян	артал ором заготовлено лесосем объект постоянной лесосе Год создания (от в холоди ного растения	Таксасционный вы менное сырье еменной базы бора) ильной камере арановичский лесс Ар)	идел Площадь, га коз
Лесосеменной об № паспорта 2.9 Место хранен Вид тары Число мест тары 3. Организация 4. Назначение с 5. Класс качесте Dev Должность	Лесной кв ъект, в кото а иия семян другая 10 поставщи семян лест ва семян [К Фамилия	артал ором заготовлено лесосем объект постоянной лесосе Год создания (от в холоди ик Е ного растения	Таксасционный вы менное сырье вменной базы бора) изьной камере арановичский лесс дарановичский лесс дарановичский лесс дарановичский лесс дарановичский лесс дарановичский лесс дарановичский лесс	идел Площадь, га коз гтая
Лесосеменной об № паспорта 2.9 Место хранен Вид тары Число мест тары 3. Организация 4. Назначение с 5. Класс качеств Делжность	Лесной кв лесной кв иия семян другая 10 поставщи семян леснование ва семян (Фамилия	артал ором заготовлено лесосем объект постоянной лесосе Год создания (от в холоди ик Е ного растения С Имя ответственного за составл	Таксасционный вы менное сырье еменной базы бора) ильной камере арановичский лесс арановичский арановичский лесс арановичский лесс арановичский лесс арановичский лесс арановичский лесс арановичский лесс арановичский лесс арановичский лесс арановичский аранови арановичский арановичски аранови аранови аранови арано	идел Площадь, га коз ггая

Figure 32 – Form for creating the document "Certificate of quality of forest plant seeds"

Note: For automatic filling of the underlined fields (Figure 33) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).

To edit a certificate it is necessary to select the desired document in the list (Figure 28) and click the "Edit certificate", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a certificate, select the desired document in the list (Figure 28) and click the "Delete certificate" button.

14. cemena saroroanena	b ever ibland paoor	в целях	1040	
Dev	К	0	T	
Должность	Фамилия ответственно	имя го за составление паспорта	Отчетсво	
				~ ~

Figure 33 – Fields for automatic filling out

4.1.3 "Documents of PFSB"

The tab is intended for working with passports of a forest seed plantation, a plus forest plantation, a plus tree, a permanent forest seed plot, a forest genetic reserve and the consolidated list of farming seed plantations. After clicking on this tab, you will see a drop-down list containing the submenu (Figure 34).

Дo	жументы ПЛСБ
	Паспорт лесосеменной плантации
	Паспорт плюсового лесного насаждения
	Паспорт плюсового дерева
	Паспорт постоянного лесосеменного участка
	Сводная ведомость хозяйственного семенного насаждения
	Паспорт лесного генетического резервата
Te	хническая поддержка РУП "Белгосле

Figure 34 – PFSB documents submenu items

4.1.3.1 Passport of a forest seed plantation

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 35).

ок паспортов					
			Ответственный за	составление	
Номер Дата создания	Организация	Должность	Фамилия	Имя	Отчество
		Добавить пасп	орт		
		Удалить паспо	орт		
		Редактировать па	спорт		
		Выход			

Figure 35 - Form of the list of documents "Passport of forest seed plantation"

To create a new passport, click on the "Add Passport" button opening a window for creating the document (Figure 36), where you have to fill out the fields. The underlined fields in the figure below are automatically filled out when you create a document.

Организация			Bapc	уки ЭЛОХ	
Древесная пор	ода				-
Назначение (по	о целям селекции)			лесосеменная У	-
Порядок ЛСП		перв	ый <u> </u>		
		Препе	n T		
		Tiacho	ppi	· · · · ·	
	лесосем	енной план	гации №		
Год закладки					
Площадь план	гации, га	2	المصالح		
Категория полу	чаемых семян лесных рас	стений:		~	
	І. Местон	ахождение пл	лантации		
Структурное по	одразделение организаци	и:	Барсуков	ское	
Лесной кварта.	nNº	Таксацио	нный выдел №		
Расположение	плантации в лесном квар	тале (прилагается с	хема).		
	II. 0	рганизация те	ерритории план	тации	
	Территория плантации	Год создания Пло	ощадь, га Процент с	от общей площади	
		Продуци	юующая площ	адь	
			Поле №		
Гол созлания			none n-		
Плошаль					
Площено	Construction of the second second				

Figure 36 – Form for creating a passport of forest seed plantation

Note: For automatic filling of the underlined fields (Figure 37) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).



Figure 37 – Fields for automatic filling out

To edit a passport it is necessary to select the desired passport in the list (Figure 35) and click the "Edit passport", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a passport, select the desired passport in the list (Figure 35) and click the "Delete passport" button.

4.1.3.2 Passport of a plus forest stand

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 38).

ок паспо	ртов					
				Ответственный за	составление	
Номер	Дата создания	Организация	Должность	Фамилия	Имя	Отчество
			Добавить пасп	орт		
			Удалить паспо	орт		
			Редактировать па	кпорт		
			Выход			

Figure 38 - Form of the list of documents "Passport of a plus forest stand"

To create a new passport, click on the "Add Passport" button, a window will open to create the document (Figure 39), where you have to fill out the fields. The underlined fields are automatically filled out when you create a document.

Организация	Барсуки ЭЛОХ	-
Древесная порода	· · · · · · · · · · · · · · · · · · ·	
	Паспорт	
Г. Местонахождение плюсово	то лесного насаждения	
2. Лесной квартал №	Барсуковское	
3 Таксационный выдел №		
4. Плошаль лесного насажления (га)		
5. Номер участка по карточке предварите		
6. Расположение участка в лесном кварта	ле (прилагается схема)	
II. Характеристика плюсового	лесного насажления	
Рельеф	Экспозиция склона	
2. Почвенно-грунтовые условия (тип почв	ы, механическии состав, подпочва)	
3. Происхождение лесного насаждения	искусственное 👻	
4. Состав по ярусам		
5. Возраст по древесным породам		
б. Средняя высота и средний диаметр дер	ева главной древесной породы: Н (м), Д (см)	
7.7	v	
7. Тип леса		
7. тип леса 8. Тип условий произрастания	v	

Figure 39 – Form for creating a passport of a plus forest stand

After filling out all the fields, click the "Save to DB" button.

Note: For automatic filling of the underlined fields (Figure 40) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).



Figure 40 – Fields for automatic filling out

To edit a passport it is necessary to select the desired passport in the list (Figure 38) and click the "Edit passport", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a passport, select the desired passport in the list (Figure 38) and click the "Delete passport" button.

4.1.3.3 Passport of a plus tree

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 41).

		Паспорт плюсовог	о дерева		
исок паспортов					
			Ответственный за	составление	
Номер Дата созда	ния Организация	Должность	Фамилия	Имя	Отчество
		Добавить пасп Удалить паспо	орт		
		Редактировать па	аспорт		
		Выход			

Figure 41 – Form of the list of documents "Passport of a plus tree"

To create a new passport, click on the "Add Passport" button opening a window to create the document (Figure 42), where you have to fill out the fields. The underlined fields in the figure are automatically filled out when you create a document.

	Организ	ация						Барсуки ЭЛОХ			
	Древесн	ая порода							Ŷ		
					_			Пасп	тао	-	
							плюсо	ового дере	ва№		
	I. Mec	тонахож	кден	ие де	ерева						
	Структур	ное подра	зделен	ние орг	анизации	1:		E	арсуковское		
	2. Лесно	й квартал і	N₽					-		6.C.	
	3. Таксац	, ционный вы	ыдел N	10	a.,						
	4. Homer		- monut	INIACKO						2 C - 2 C	
		удерева по	2 IODVIA	INHERK	эму лицу,	ведущему	лесное х	озяйство			
	5. Распол	ложение де	ерева	в такса	ионном	выделе (п	лесное ха рилагаетс	озяйство :я схема)			
	5. Распо. 6. Как от	ложение де мечено де	ерева і рево в	в такса натуре	зму лицу, ционном е	ведущему выделе (пј	лесное х рилагаетс	озяйство я схема)			
	5. Распо. 6. Как от	ложение де мечено де ется элитны	ерева рево в	в такса натуре	зму лицу, ционном е	выделе (пј	лесное х рилагаетс	озяйство я схема)			
	5. Распол 6. Как от Явля II. Тан	ложение де мечено де ется элитны ксацион	ерева рево в ым ІНАЯ	в такса натуре хара	ционном е ктерис	выделе (пр тика ле	лесное хо рилагаетс сного н	озяйство я схема) часаждения	таксационного	выдела	
	5. Распо. 6. Как от Явля II. Тан	ложение де мечено де ется элитны ксацион	ерева рево в ым І НАЯ	в такса натуре хара	ционном ≊ ктерис (по яр	выделе (пр тика ле русу, где	лесное хо рилагаетс сного н отобр	озяйство я схема) насаждения рано дерево	таксационного р	выдела	
	5. Распо. 6. Как от Явля II. Тан	ложение де мечено де ется элитны ксацион	ерева рево в ым І ная	в такса натуре хара	ционном е ктерис (по яр	выделе (пр тика ле русу, где	лесное хо рилагаетс сного н сотобр	озяиство я схема) насаждения ано дерево Селекционная	таксационного (выдела	
	5. Распо. 6. Как от Явля II. Тан	ложение да мечено де ется элитны ксацион	ерева рево в ым іная	в такса в натуре хара	ционном ктерис (по яр	выделе (пр тика ле тусу, где	лесное х рилагаетс сного н е отобр Запас	озяиство я схема) насаждения нано дерево Селекционная категория	таксационного () Господствующая морфологическая	выдела	
	5. Распо. 6. Как от Явля II. Тан Состав	ложение да мечено де ется элитнь ксацион Класс возраста	ерева рево в ым іная Н, м	в такса в натуре хара Д. см	ционном е ктерис (по яр	выделе (пр тика ле русу, где Полнота	лесное хо рилагаетс сного н е отобр Запас на 1 га,	озяиство я схема) насаждения ано дерево Селекционная категория лесного	таксационного) Господствующая морфологическая или фенологическая	выдела	
	5. Распо. 6. Как от Л Явля II. Тан	лерева по ложение да мечено де ется элитны ксацион Класс возраста	ерева рево в ым іная Н, м	в такса в натуре хара Д, см	ционном е ктерис (по яр Бонитет	выделе (пр тика ле русу, где Полнота	лесное х рилагаетс сного н сотобр Запас на 1 га, куб.м.	озяиство я схема) насаждения рано дерево Селекционная категория лесного насаждения	таксационного) Господствующая морфологическая или фенологическая форма	выдела	
1. Про	5. Распо. 6. Как от Явля II. Та Состав	ксацион Класс возраста	ерева в рево в ниная	в такса в натуре хара Д, см	ционном е ктерис (по яр Бонитет	выделе (пр тика ле русу, где Полнота искусств	лесное х рилагаетс сного н сотобр Запас на 1 га, куб.м.	озяиство я схема) насаждения насаждения селекционная категория лесного насаждения	таксационного Господствующая морфологическая или фенологическая форма	выдела	
1. Проі 2. Тип .	5. Распо. 6. Как от Явля II. Тан Состав исхожден леса	ложение да мечено де ется элитнь ксацион Класс возраста ние	ерева прево вым иная	в такса в натуре хара Д, см	му лицу, ционном е ктерис (по яр Бонитет	выделе (п тика ле русу, где Полнота искусств	лесное х рилагаетс сного н сотобр Запас на 1 га, куб.м. венное	озяиство я схема) насаждения рано дерево Селекционная категория лесного насаждения	таксационного Господствующая морфологическая или фенологическая форма	выдела	
1. Проі 2. Тип . 3. Тип :	5. Распо. 6. Как от Явля II. Та Состав исхожден леса условий	ложение да мечено де ется элитнь ксацион Класс возраста ние	ерева в рево в им ная н, м	в такса в натуре хара Д, см	му лицу, ционном е ктерис (по яр Бонитет	выделе (п тика ле нусу, где Полнота искуссти	лесное х рилагаетс сного н е отобр Запас на 1 га, куб.м. венное	озяйство я схема) насаждения рано дерево Селекционная категория лесного насаждения	таксационного) Господствующая морфологическая или фенологическая форма	выдела	

Figure 42 – Form for creating a passport of a plus tree

Note: For automatic filling of the underlined fields (Figure 43) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).

должноств	Фамилия	RIMA	OTHEICEO	
	Добав	ить члена комиссии		
Dev	K	0	Т	
Должность	Фамилия	Имя	Отчетсво	
Дата Выбор даты	ответственного за	а составление паспорта		
Сохранить в БД		Экспорт в MS Word		выход

Figure 43 – Fields for automatic filling out

To edit a passport it is necessary to select the desired passport in the list (Figure 41) and click the "Edit passport", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a passport, select the desired passport in the list (Figure 41) and click the "Delete passport" button.

4.1.3.4 Passport of a permanent forest seed base

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents (Figure 44).

ок паспо	ртов					
				Ответственный за	составление	
Номер	Дата создания	Организация	Должность	Фамилия	Имя	Отчество
			Добавить пасп	орт		
			Удалить паспо	орт		
			Редактировать па	спорт		
			Ruyon			

Figure 44 - Form of the list of documents "Passport of a permanent forest seed plot"

To create a new passport, click on the "Add Passport" button opening a new window to create the document (Figure 45), where you have to fill out the fields. The underlined fields in the figure are automatically filled out when you create a document.

Организация	Барсуки ЭЛОХ
Древесная порода	· •
	Паспорт
постоянного	лесосеменного участка №
Год закладки	Площадь лесного насаждения, га
Категория получаемых семян лесных растений	і: нормальные
I. Местонахождение участка	
Структурное подразделение организации:	Барсуковское
2. Лесной квартал №	
3. Таксационный выдел №	
Расположение ПЛСУ в лесном квартале (прила	агается схема).
II. Характеристика таксационного	о выдела
Рельеф	
Экспозиция 🗸	Крутизна склона
Высота над уровнем моря, м	
Почва и почвообразующая древесная порода	· · · · · · · · · · · · · · · · · · ·
Тип лесорастительных условий	
Бонитет	
господствующая форма главной древесной по	роды

Figure 45 – Form for creating a passport of a permanent forest seed plot

After filling out all the fields, click the "Save in DB" button.

Note: For automatic filling of the underlined fields (Figure 46) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).

			-	
Dev	K	14.00	0	
должноств	Фамилия	имя	01461660	
	OTEETCTEEHHOLO 33	а составление паспор	Ta	
		recercubilentite indentop	10	
Дата Выбор даты		eoclassicilitie nacitop		
Дата Выбор дать		recetablicative nacrop		Ŷ

Figure 46 – Fields for automatic filling out

To edit a passport it is necessary to select the desired passport in the list (Figure 44) and click the "Edit passport", then you can make changes to the document and save the updated document clicking the "Save in DB" button.

To delete a passport, select the desired passport in the list (Figure 44) and click the "Delete passport" button.

4.1.3.5 Consolidated sheet of a farming seed plantation

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents.

To create a new sheet, click on the "Add sheet" button opening a window to create the new document (Figure 47), where you need to fill out the fields. The underlined fields are automatically filled out when you create a document.

Организация		Барсун	си ЭЛОХ		~
Іревесная порода				aa 2	~
	Хозяйственно	е семенное нас	аждение №		
Структурное подразделение органи	ізации:		Барсуковско	be la	
. Лесной квартал №					
Таксационный выдел №					
. Площадь					
. Состав лесного насаждения					
. Класс возраста					
. Возраст, лет					
. Полнота					
3. Средняя высота, м					
). Средний диаметр, см					
0. Класс бонитета		¥.			
1. Типа леса		~			
2. Запас, куб. м. на 1 га					
3. Запас, куб. м. на участке					
Dev	к		0		Т
олжность	Фамилия		И	RN	Отчетсво
	отве	тственного за составлени	е паспорта		
ата Выбор даты 15					
* Проектируются при пов	едении лесоустроите	льных работ.			
Оеч Іолжность Іата Выбор даты 15 * Проектируются при пов	К Фамилия отве ведении лесоустроите	тственного за составлени льных работ.	ие паспорта	NR.	

Figure 47 – Form for creating a statement of farming seed plantations

After filling out all the fields, click the "Save in DB" button.

Note: For automatic filling of the underlined fields (Figure 48) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).



Figure 48 – Fields for automatic filling out

To edit a sheet, you need to select the desired document in the list and click "Edit sheet", then you can change the document and save the updated document by clicking "Save in DB".

To delete a sheet, you need to select the desired document in the list and click "Delete sheet".

4.1.3.6 Passport of a forest genetic reserve

After selecting this menu item, a page will open with a list of all previously created documents of this type with the possibility to create new ones as well as edit and delete old documents.

To create a new passport, click on the "Add passport" button opening a new window to create the document (Figure 49), where you should fill out the fields. The underlined fields are automatically filled out when you create a document.

Организация	Барсуки ЭЛОХ	
Древесная порода		~
	Паспорт	-
Macrowawa and a second of the		
Г. Местонахождение лесного те Структурное подразделение организации:	Бараковское	
2. Лесной квартал №	варсуковское	-
3. Таксационный выдел №		
4. Категория лесов		
5. Географические координаты		
6. Юридический адрес организации	Буда-Кошелевский	
1.0 .4 1 1.	район	-
220220 Гомельское	street 69	
почтовый индекс ПЛХО	улица дом	
II. Характеристика лесорастите	льных условий	
1. Природно-климатическая зона	умеренная	
2. Подзона		
3. Лесорастительный район (подрайон)		
4. Лесосеменной район (подрайон)		
5. Среднегодовая температура гр. Цельсия		
 Годовое количество осадков, мм 		
в т.ч. за вегетационный период		
 Продолжительность безморозного перис 	да, дней	
8. Число дней с температурой свыше 5 гр.	свыш	е 10 гр.

Figure 49 – Form for creating a passport of a forest genetic reserve

Note: For automatic filling of the underlined fields (Figure 50) it is necessary to make the initial configuration of the application (point 4.1.1.1 of this manual).



Figure 50 – Fields for automatic filling out

To edit a passport, you need to select the desired passport in the list and click "Edit passport", then you can change the document and save the updated document by clicking "Save in DB".

To delete a passport, select the desired passport in the list and click the "Delete passport" button.

4.1.4 "Consolidated inventories"

The tab is intended for generation, import and export of sheets based on PFSB documents. After clicking on this tab, a drop-down list containing menu items will appear (Figure 51).

	гы ПЛСЬ
Сводные	ведомости инвентаризации
лсп плн пд плсу хсн лгр	лесных семян и поддержка РУП "Белгослес

Figure 51 – Consolidated inventories submenu items

4.1.5 "Record book of forest seeds"

The tab is designed to account for forest seeds. After clicking on this tab, you will see a drop-down list containing the submenu (Figure 52).

д	окументы на сырьё/семена
Д	окументы ПЛСБ
C	зодные ведомости инвентаризации
K	нига учета лесных семян
	Учет лесных семян, заготовленных предприятием в своем хоз Учет лесных семян, приобретенных предприятием в других хо Без деления по организации где семена заготовлены
	эмощь
Te	хническая поддержка Рэтт Велгослес

Figure 52 - Record book of forest seeds submenu items»

The information on the book forms is displayed on the basis of seed passports.

4.1.6 "Directories"

Use this tab to view information about the existing lists of species in the database (Figure 54), organizations (Figure 55), districts (Figure 56) and forest types (Figure 57). After clicking on this tab, you will see a drop-down list containing the submenu (Figure 53).

Документы на сыр	ьё/семена
Документы ПЛСБ	
Сводные ведомост	ги инвентаризации
Книга учета лесны	х семян
Справочники	
Справочник пород Список организаций Районы Тип Леса	ска РУП "Белгослес

Figure 53 – Directories submenu items

Род растения	Вид растения	Род растения (латинское название)	Вид растения (латинское название)
Платан	Платан западный	Platanus	Platanus occidentalis
Понцирус	Понцирус трехлисточковый	Poncirus	Poncirus trifoliata
Принсепия	Принсепия китайская	Prinsepia	Prinsepia sinensis
Птелея	Птелея трехлистная	Ptelea	Ptelea trifoliata
Шиповник	Роза сизая	Rosa	Rosa glauca
Робиния	Робиния лжеакация	Robinia	Robinia pseudoacacia
Шиповник	Роза даурская	Rosa	Rosa davurica
Шиповник	Роза иглистая	Rosa	Rosa acicularis
Платан	Платан восточный	Platanus	Platanus orientalis
Шиповник	Роза коричная	Rosa	Rosa majalis
Шиповник	Роза морщинистая	Rosa	Rosa rugosa
Платикладус	Платикладус восточный, пл	Platycladus	Platycladus orientalis
узыреплодник	Пузыреплодник калинолист	Physocarpus	Physocarpus opulifoliu:
Рябина	Рябина глоговина	Sorbus	Sorbus torminalis
нежноягодник	Снежноягодник белый	Symphoricarpos	Symphoricarpos albus
Рябина	Рябина обыкновенная	Sorbus	Sorbus aucuparia
Секуринега	Секуринега полукустарникс	Securinega	Securinega suffruticosa
Сирень	Сирень венгерская	Syringa	Syringa josikaea
Скумпия	Скумпия или желтинник	Cotinus	Cotinus coggygria
Слива	Слива домашняя	Prunus	Prunus domestica
Слива	Слива колючая, терн	Prunus	Prunus spinosa
Слива	Слива растопыренная	Prunus	Prunus cerasifera
Слива	Слива уссурийская	Prunus	Prunus ussuriensis
Смородина	Смородина альпийская	Ribes	Ribes alpinum
Смородина	Смородина золотистая	Ribes	Ribes aureum
Пихта	Пихта сибирская	Abies	Abies sibirica
Смородина	Смородина красная	Ribes	Ribes rubrum

Figure 54 – Species directory submenu items



Figure 55 – Organizations directory submenu items

Чаименование	Код СОЛИ	гплхо	
арановичский	104	Брестское	-
Несвижский	542	Минское	
Мядельский	540	Минское	
Лолодечненски	538	Минское	
Минский	536	Минское	
Любаньский	534	Минское	
Логойский	532	Минское	
Крупский	530	Брестское	
Копыльский	528	Минское	
Клецкий	525	Минское	
Дзержинский	522	Минское	
Воложинский	520	Минское	
Пуховичский	544	Минское	
Вилейский	513	Минское	
Березинский	504	Минское	
Щучинский	458	Гродненское	
Сморгонский	456	Гродненское	
Слонимский	454	Гродненское	
Свислочский	452	Гродненское	
Ошмянский	449	Гродненское	
Островецкий	446	Гродненское	
Lesereureuru	443	Гродненское	12

Figure 56 – District directory submenu items

Аббривиатура	Название
ПМ	Пойменный
ИВ	Ивняковый
TAB	Таволговый
Б-Р	Болотно-разнотравный
OC-TP	Осоково-травяной
БОЛ-П	Болотно-папоротниковый
ПШ-СФ	Пушицево-сфагновый
KAC	Касатиковый
ЗM	Зеленомошный
CΦ-M	Сфагновый мелиорир.
ДМ-М	Долгомошный мелиорир.
БАГ-М	Багульниковый мелиор.
OC-M	Осоковый мелиорир.
ОСФ-М	Осоково-сфагн.мелиор.
KP-M	Крапивный мелиорир.
ΠΑΠ-Μ	Папоротник.мелиорир.
TAB-M	Таволговый мелиорир.
Ш-ПМ	Широкотравно-пойменный
зл	Злаковый
Я-ПМ	Ясенево-пойменный
OP	Орляковый
ЗЛ-ПМ	Злаково-пойменный
50.42	e

Figure 57 – Forest types directory submenu items

4.1.7 "Help"

Use this tab to view the user manual, the story of development of this software (Figure 59) as well as view the current software version (Figure 60). After clicking on this tab, you will see a drop-down list containing the submenu (Figure 58).

документы на с	ырьё/с	семена
Документы ПЛС	Б	
Сводные ведом	ости и	нвентаризации
Книга учета лес	ных се	мян
Справочники		
Сервис		
Помощь		
Помощь Руководство пользов История	зателя	РУП "Белгосле

Figure 58 – Help submenu items

🧻 History — Блокнот — 🗆	×
Файл Правка Формат Вид Справка	
Версия 1,0,0 (10,04,2020)	^
- разработана часть документов и форм для работы с про	10
Версия 1,0,1 (14,042020)	
- значительно улучшен интерфейс	
Версия 1,0,2 (16,04,2020)	
- добавлена возможность экспорта в MS Word для паспор	71
Версия 1,0,3 (20,04,2020)	
- для многих документов добавлена возможность экспорт	3
- обновлено руководство пользователя	
Версия 1,0,4 (23,04,2020)	
- для сводных ведомостей инвентаризации добавлена во экспорта в MS Word	3
	~

Figure 59 – History of changes in the application



Figure 60 - Window "About the software"

4.1.8 "Technical support of the RUE "Belgosles"

This tab is intended for redirection to the website of the RUE "Belgosles" with the possibility of submitting an application for technical support (Figure 61).

	Документы на сырьё/семена
	Документы ПЛСБ
	Сводные ведомости инвентаризации
	Книга учета лесных семян
	Справочники
	Сервис
	Помощь
	Техническая поддержка РУП "Белгослес"
	Перейти к оформлению заявки
-	0

Figure 61 – Technical support of the RUE "Belgosles" submenu items

4.1.9 "Brightness (transparency) of forms control"

This control is designed to change the transparency of application windows (Figure 62). To change, move the "slider" on the scale. Transparency values are set from 0% to 100%, where 0% - forms are completely transparent, 100% - forms are not transparent.

Перей	ги к оформлению заявки	
		ÿ÷
(Выход	

Figure 62 – Brightness (transparency) of forms control

5 ALARM SITUATIONS

If an alarm situation occurs while the data aggregation software module is running, a corresponding message box is displayed on the monitor.

In the event of an alarm situation, the user should take a screenshot of the error message and send information about the alarm to the software developer by email at support@belgosles.by, or by submitting an application in the section "Technical support" on the website of the RUE "Belgosles" (point 4.1.8 of this manual) to identify and eliminate the causes of its occurrence.

6 RECOMMENDATIONS HOW TO USE

The AWS-S technical support should include means of protection against power failures.

The functioning of the AWS-S hardware should be carried out with standard preventive maintenance.

To protect the AWS-S from computer viruses that interfere in the functioning of software and harm information, antivirus protection packages should be installed on computers.

	Notes
<u> </u>	
	Notes

