Development of software for automation of EDS

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01
INTRODUCTION

Functional units

INTRODUCTION

Main functional units of electronic reporting

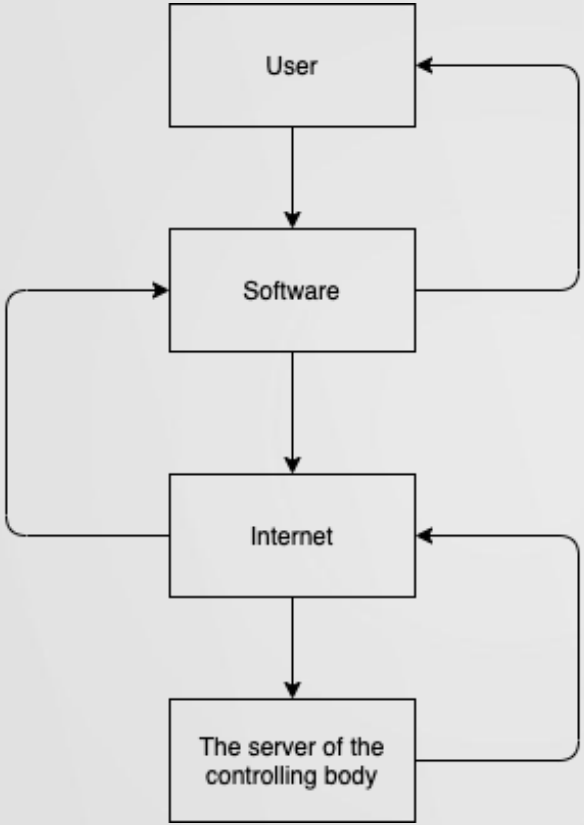
- Internet Connection
- Software
- Report
- Digital Key

02

STRUCTURAL SCHEME

Main Components

STRUCTURAL SCHEME



Main components of the structural scheme of the electronic reporting system

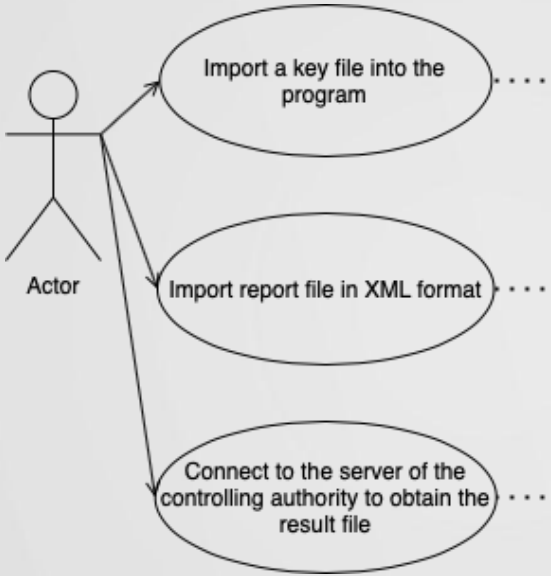
- User
- Software
- Internet
- The server of the controlling body

03

PRECEDENT DIAGRAM

Main modules of the diagram

PRECEDENT DIAGRAM

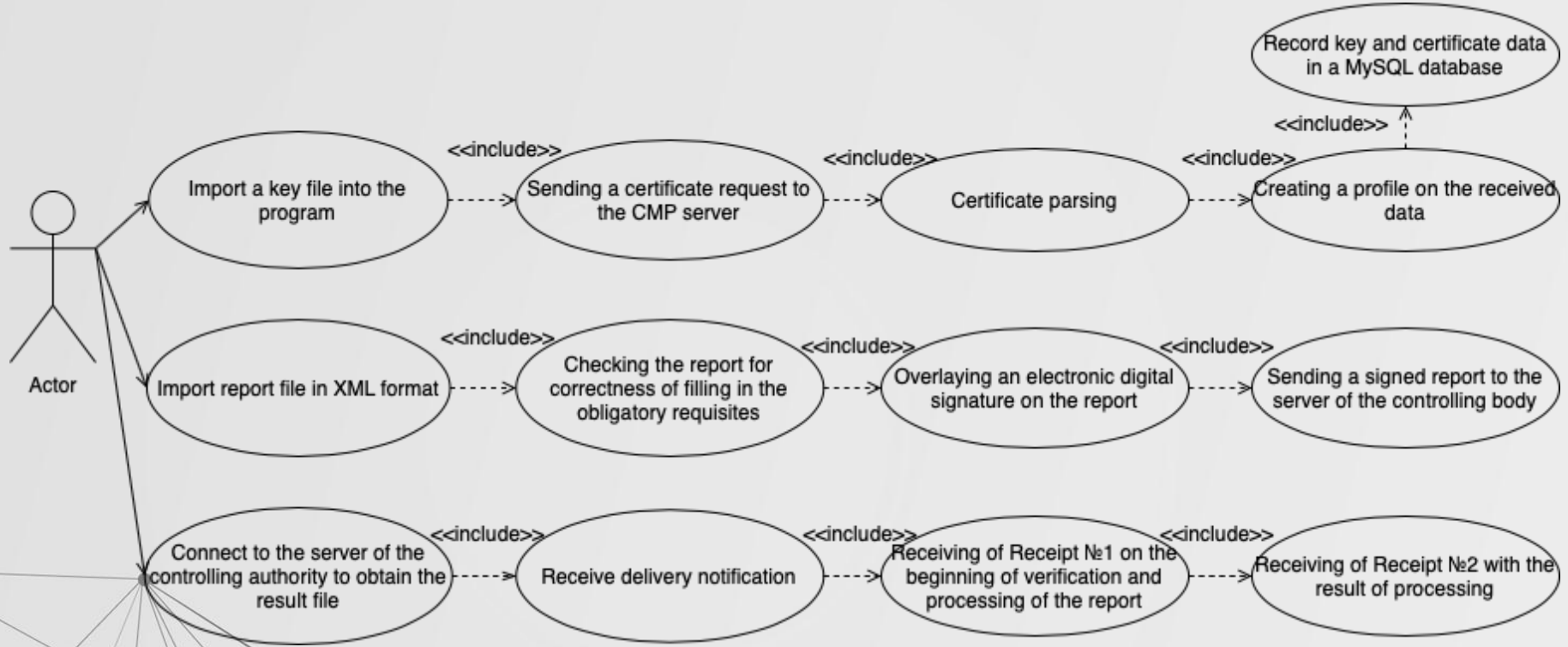


Precedent diagram consists of three main modules

- Import a key file into the program
- Import report file in XML format
- Connect to the server of the controlling body

The full diagram is shown on the next slide.

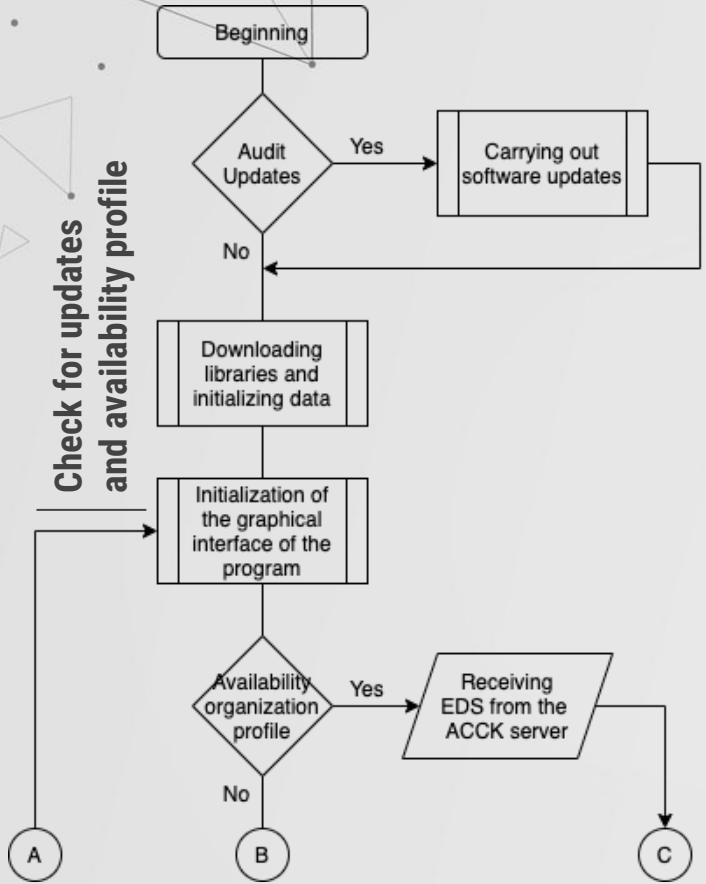
PRECEDENT DIAGRAM

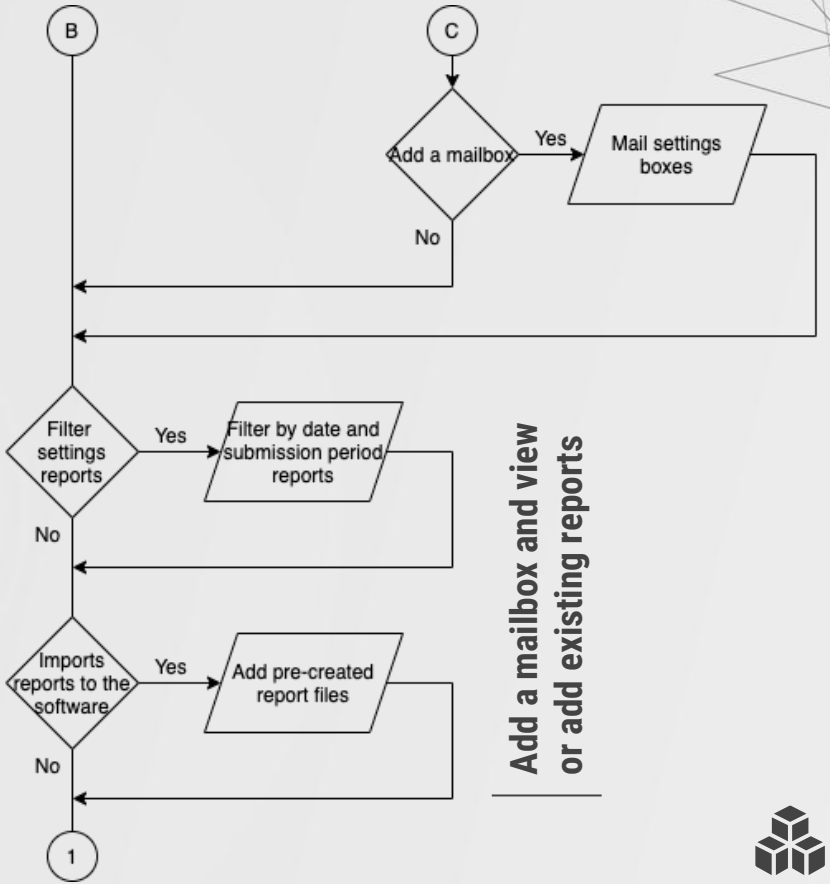


04
ALGORITHM OF THE SYSTEM

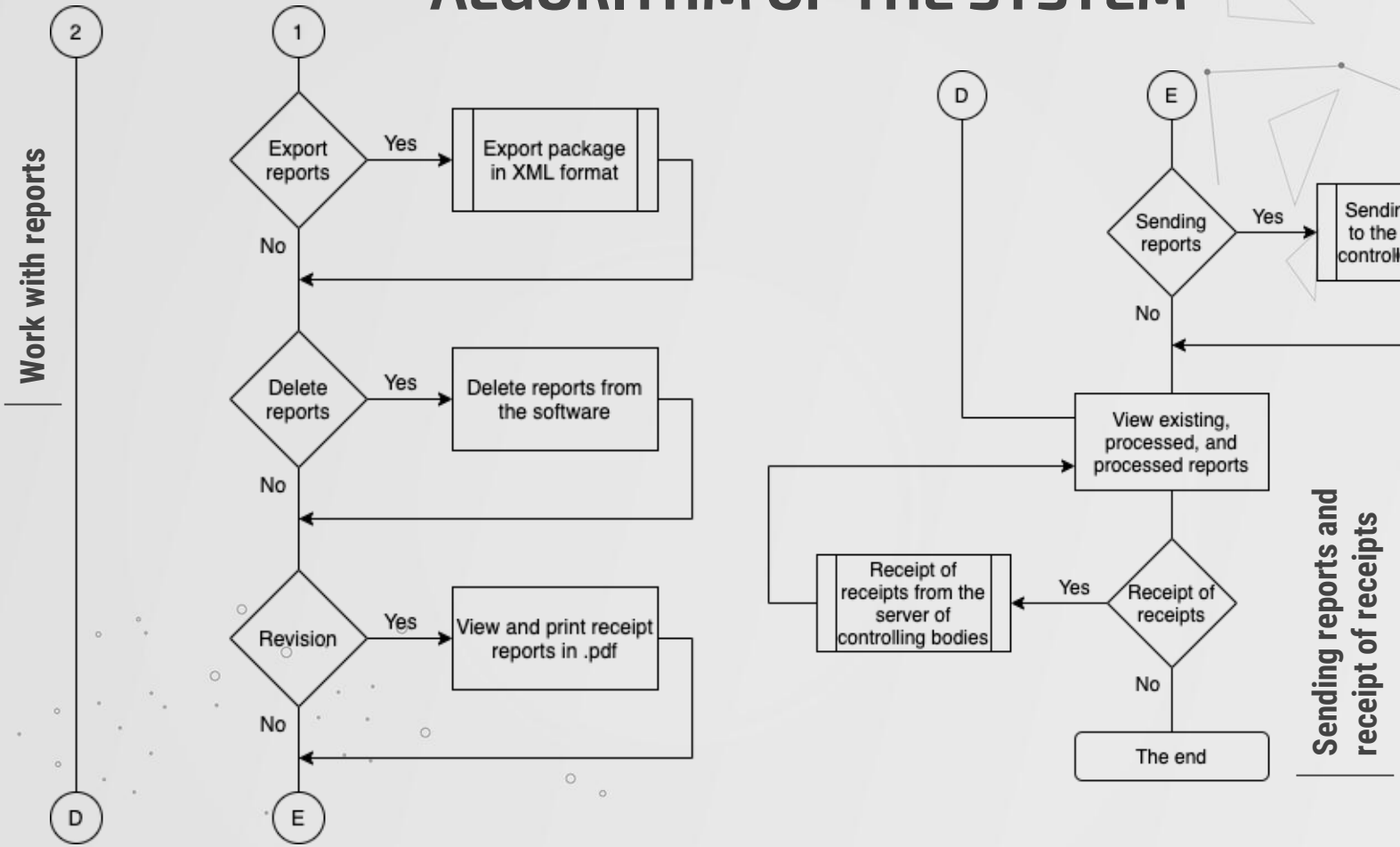
The full algorithm shown in two slides

ALGORITHM OF THE SYSTEM





ALGORITHM OF THE SYSTEM



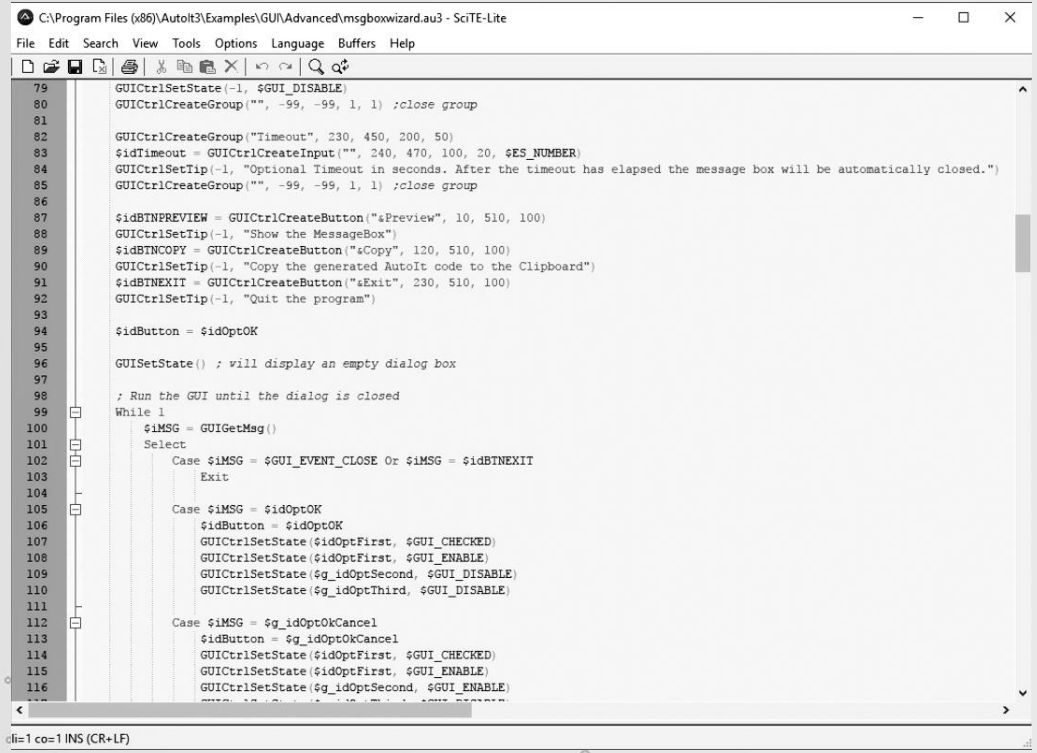
05

AUTO IT

A programming language

AUTO IT

SciTE Editor



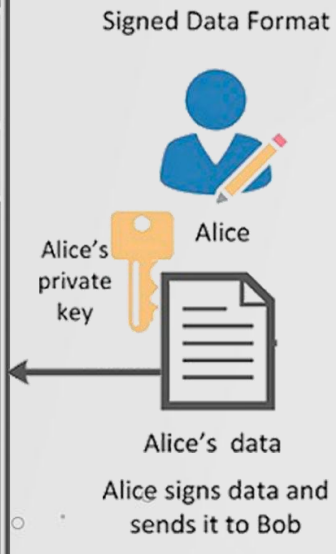
AutoIt and SciTE

- AutoIt is a language for automating tasks in Windows. Includes a GUI framework that allows to use simple scripts with typical graphical components in scripts.
- AutoIt is distributed with a SciTE-based IDE. The compiler, helper utilities, and reference materials are fully integrated, making the editor the default environment for developers using AutoIt.

06
SOFTWARE DEVELOPMENT

Developing and testing all modules of the program

CRYPTOGRAPHIC MODULE



ASN.1 AND PKCS # 7

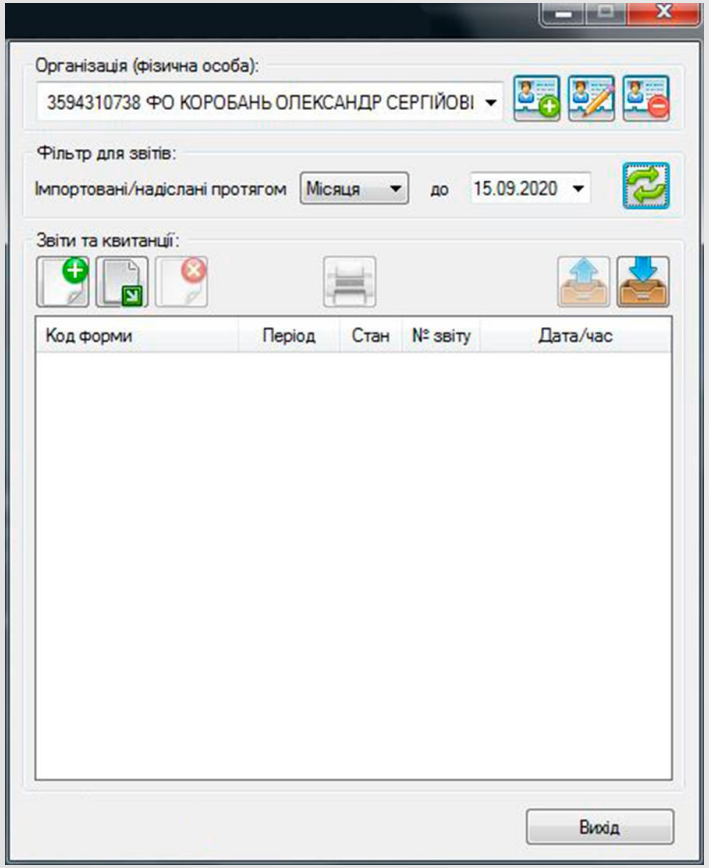
ASN.1 is a standard that describes the structure of messages received using cryptography. The standard p7s file has an ASN.1 structure.

Standard PKCS # 7 / p7b file structure:

- version
- digestAlgorithms
- contentInfo
- certificates
- signerInfos

GRAPHICAL INTERFACE

Software interface

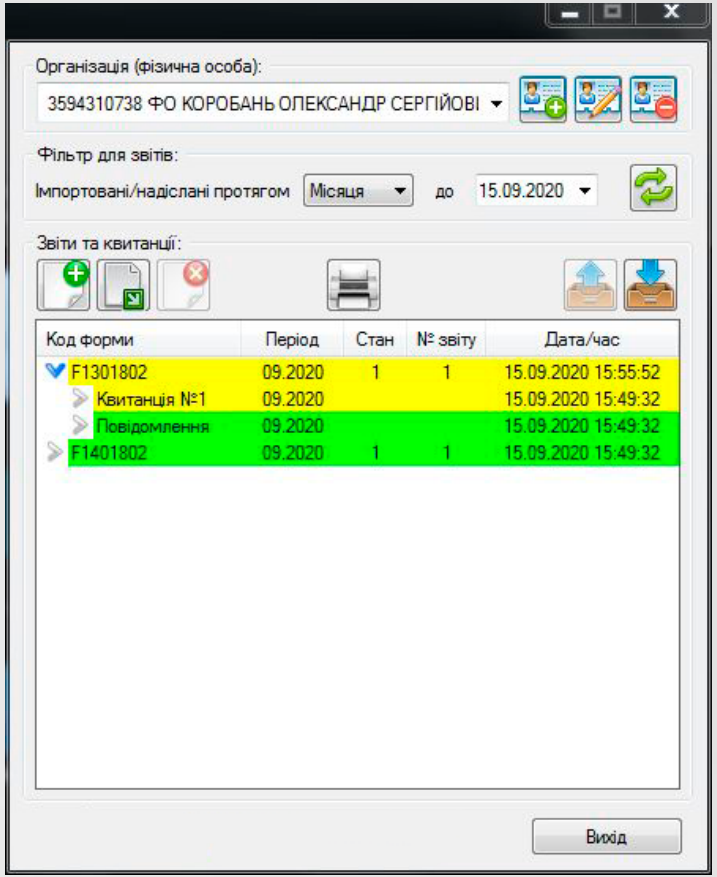


Main parts of interface

- Work with the profile of the organization (individual).
- Window filter with imported and transmitted reports.
- Functionality for working with reports.

"Notification of receipt of reports"

After the successful transfer of reports to the server of regulatory authorities, the attached report changed color from white to yellow, and an arrow appeared when you click on it to open a tree of messages and received receipts for viewing and saving.



THANKS

Does anyone have any questions?

CREDITS: This presentation was created by Alexander Koroban.