# Digital Transformation of National Accreditation Body and Relavance for the Laboratory Information Management Systems, a Case Study of Institute for Accreditation of the Republic of North Macedonia (IARNM)

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# INTRODUCTION

- In a world where digitalization is ubiquitous - and easily made possible through our computers and smartphones, we have grown accustomed to using online services.

- The IARNM has implemented one of the most advanced digitalization solutions which makes the interaction between the assessors, external entities (e.g. Laboratories) and IARNM employees much more modern and convenient as basically every step of the complex process can be done online.

# Prerequisites for Digital Transformation

I.  High <u>awareness</u> and <u>determination</u> among management that digital transformation is unavoidable.

II. A continuous process that does not stop requires <u>time</u> and <u>commitment</u>

III. <u>Culture of change</u> – imminent

IV. Adequate <u>team</u> and <u>equipment</u>

# Business plan for Digital Transformation

I. Digital readiness - fully equipping the NAB with the latest technical equipment - smooth transition to digital work

II. Digital literacy - improving the skills of employees through continuous training related to new systems

III. Digital transformation - a process that continuously flows and is upgraded through the improvement of software programs and their integration

# Digitalization of the Working Processes in IARNM

Accreditation Information System (AIS)

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Document Management System (DMS)

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Enterprise Resource Planning System (ERP)

# Aims and benefits of the AIS 1

- Improving efficiency and transparency
- Faster decision making
- Agility improvement
- Improvement of customer satisfaction
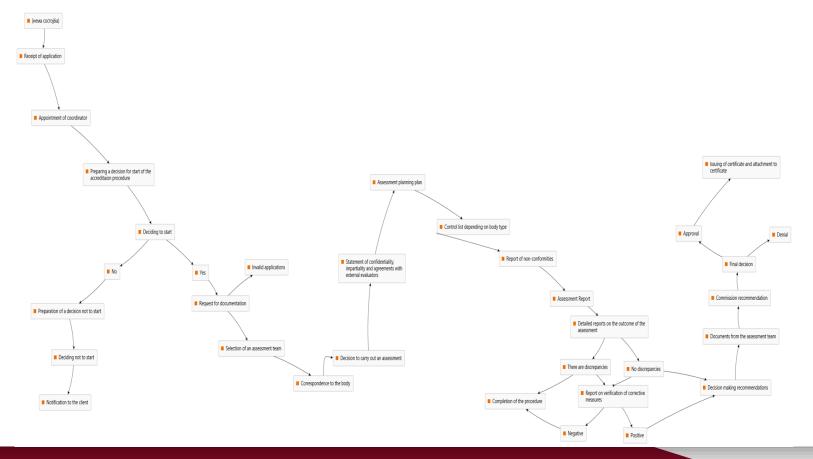- Providing accurate data and reporting at all times

# Aims and benefits of the AIS 2

- More effective remote work
- Improvement of internal and external communication
- Dealing with the new challenges of digitalization (digital documents and signatures, IT security, GDPR, etc.)
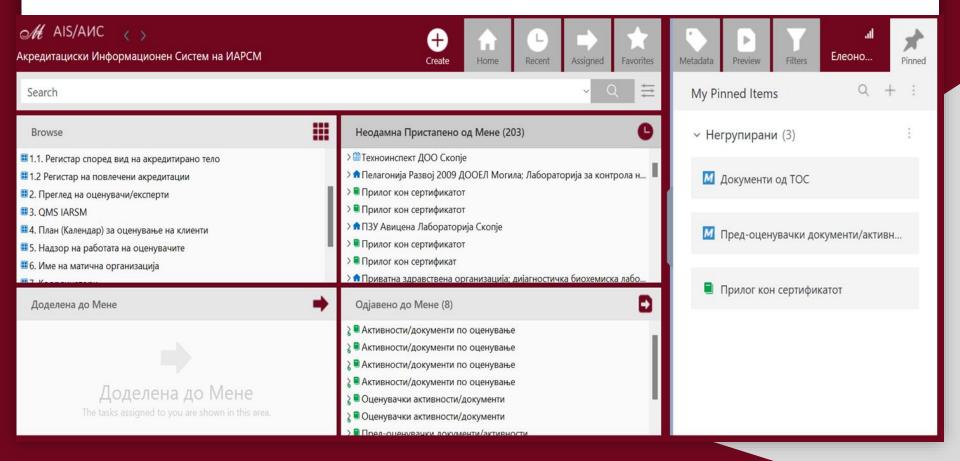- Saving tons of paper
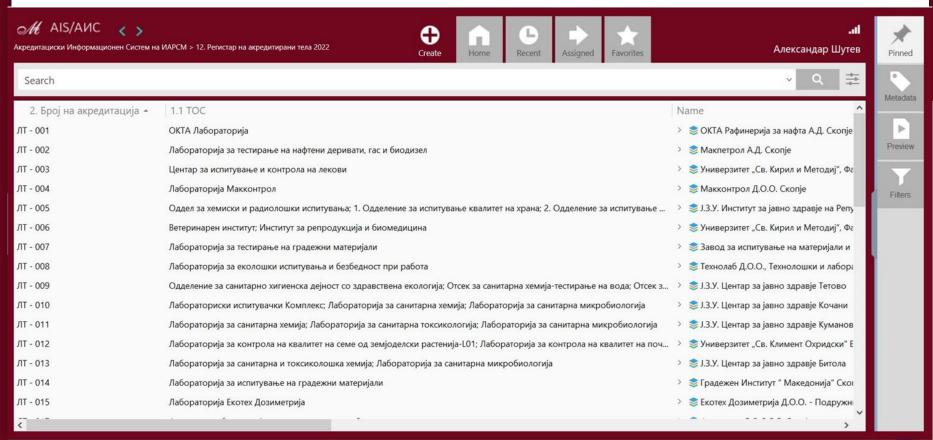
# AIS - DOCUMENT MANAGEMENT SYSTEM (DMS) STRUCTURE
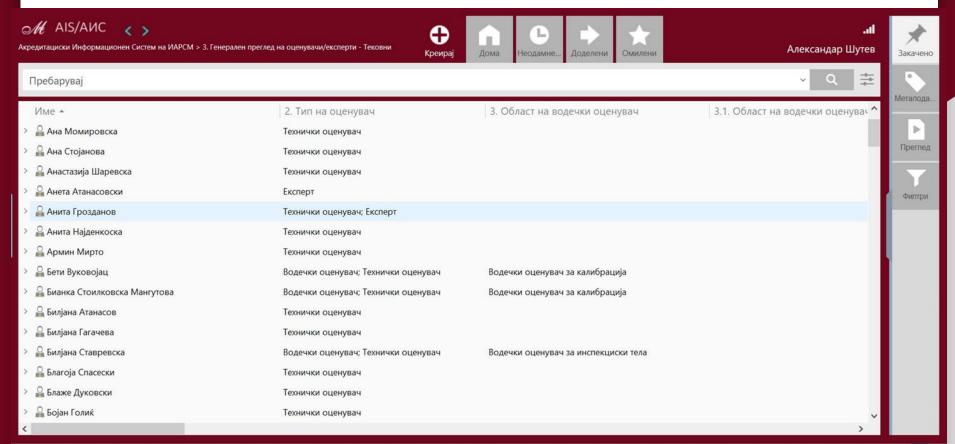
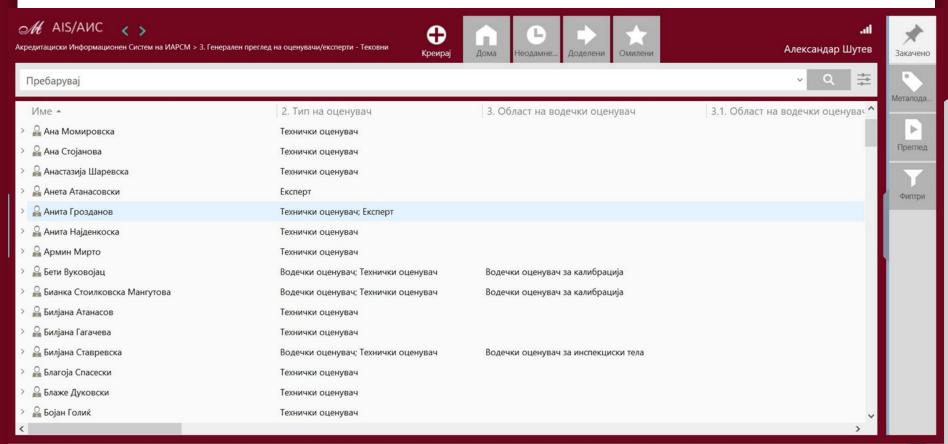# Assessment workflow - document movement through AIS

# General overview of AIS

# Overview of CABs in AIS

# Overview of assessors in AIS

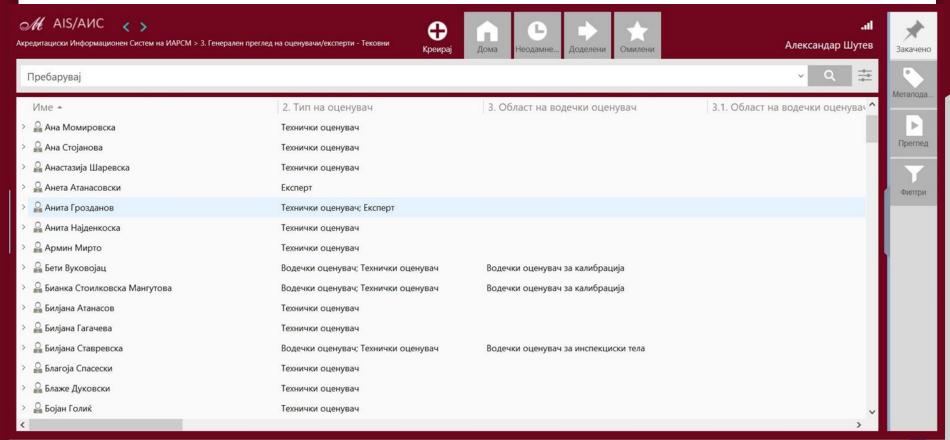# Relationship CAB-assessors-assessment

# Annual assessment plans

# II. Enterprise Resource Planning System (ERP)

- Archive
- Financial operations - accounting, salary calculation, fixed assets, data encryption
- Human resources - information on employees, entry and calcula... of vacations and leave, employee file
- Material operations - inventory, invoicing, price list,
work with departments

# Digital Transformation in Practice 1
## NAB < Assessors > Accredited Laboratories

- Provision of quality services that meet the needs of laboratories
- Transparency, efficiency, quick administrative response, accredited laboratories receive fast, open, and transparent access to services and response to requests
- Simplification of the entire procedure for accreditation, re-accreditation, or extension of the scope of accreditation.

# Digital Transformation in Practice
## NAB < Assessors > <u>Accredited Laboratories</u> 2

- Receiving the necessary documents online - and fill them online
- Downloading all procedures, protocols and forms needed for accreditation of the laboratory
- The control fields on the online system reduce the possibilities of human errors
- The autofill and replication of the fields reduces the number of times to input the same data repetitively

# Digital Transformation in Practice
## NAB < <u>Assessors</u> > Accredited Laboratories 2

- The lead assessors and case managers from NAB can immediately see and process the documents (this greatly reduces input errors)
- Assessors can view assigned tasks and progress - online
- Reduced physical documents that need to be signed

and hand delivered (this is especially convenient
for evaluators who live faraway from the location).
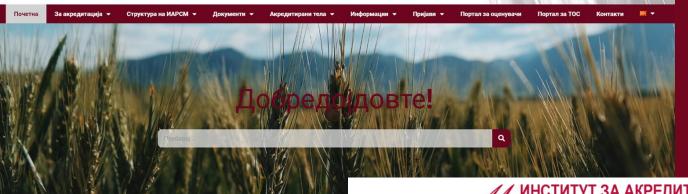
- IT experts are included as assessors in accreditation process according to the ISO 17025 and ISO 15189 assessments of the laboratories in the evaluation of sample management and traceability, reporting and data management of the laboratories.

# Website and Portals for the Assessors and CABs

- The website - completely redesigned so that the information needed by customers and assessors is easily accessible and transparent
- Available in Macedonian, English and Albanian
- Regular publication of the latest documents, events and news
- Through the website, the web portals will serve for full communication with assessors and CABs (labs)
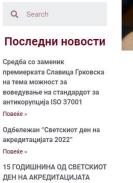
ИНСТИТУТ ЗА АКРЕДИТАЦИЈА
НА РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА

Почетна | За акредитација ▾ | Структура на ИАРСМ ▾ | Документи ▾ | Акредитирани тела ▾ | Информации ▾ | Пријави ▾ | Портал за оценувачи | Портал за ТОС | Контакти | ▾

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Светски ден

WAD 2022 - Accreditation: Su

🔍 Search

Најава на портал за оценувачи

## Последни новости

Средба со заменик премиерката Славица Грковска на тема можност за воведување на стандардот за антикорупција ISO 37001
Повеќе »

Одбележан "Светскиот ден на акредитацијата 2022"
Повеќе »

15 ГОДИШНИНА ОД СВЕТСКИОТ ДЕН НА АКРЕДИТАЦИЈАТА
Повеќе »

Светски ден на акредитација 09 Јуни 2022
Повеќе »

Добредојдовте на корисничкиот портал за оценувачи!

За да продолжите кон порталот кликнете на копчето НАЈАВА, од каде што ќе бидете пренасочени кон формата за најава на порталот

🔓 НАЈАВА

Немате профил? Регистрирајте се

➡ Регистрација

# *SURVEY OF CUSTOMER SATISFACTION WITH THE USE OF SERVICES OF IARNM*

- Quantitative telephone CATI methodology
- Performed by professional agency for rating of the public opinion
- Anonymously
- Evaluation of the assessors by CABs

# Quantitative telephone CATI survey

**POPULATION**

Organizations in RN Macedonia (CABs) accredited by the Institute for Accreditation of RN Macedonia

**TIMEFRAME**

17.05.2021 – 20.05.2021

**SAMPLE DESIGN**

CAB list submitted by IARNM

**INTERVIEWER TEAM**

5 telephone interviewers

**SAMPLE SIZE**

155 organizations

**AVERAGE LENGTH OF THE SURVEY**

12 minutes

# KEY FINDINGS

## KNOWLEDGE OF IARNM WORK

Knowledge of IARSM work was rated with an average score of **4,74**, on a scale of 1 to 5, where 1 = unsatisfactory, while 5 = satisfactory.

8 out of 10 accredited organizations gave the highest score **5** for knowledge of IARNM work

## LEVEL OF PROVISION SERVICE

The level of service provision by the IARNM was rated with an average score of **4,8**

The highest marks (**4,9**) are given by accredited organizations for:

- Appropriate manner and deadline of IARNM's response to the request for extension of the scope of accreditation
- The way of communication and behavior of IARNM employees

The lowest rating (**4,56**) is given by accredited organizations for

- IARNM engagement in promoting the importance of accreditation

## QUALITY OF ACCREDITATION DOCUMENTS

The quality of accreditation documents was assessed with an average grade 4,75

8 out of 10 accredited organizations give the highest score of **5** for all examined aspects of document quality:

- Contents of documents
- Unambiguity and comprehensibility of documents
- Ease of availability and provision of sufficiently relevant IARSM information package data
- Ease of completing the accreditation application

## AVAILABILITY OF INFORMATION ON THE IARNM WEBSITE

The availability of information on the accreditation procedure on the IARNM website was rated with an average score of 4.65

**75%** of accredited organizations give the highest score 5 for the quality of information found on the IARNM website

**70%** of accredited organizations give the highest score 5 za organizaciju i strukturu Internet stranice IARSM

# STUDY ON THE DIGITALIZATION IN CONFORMITY ASSESSMENT BODIES

- An international project carried out by BAM, Technische Universität Berlin and Canterbury University
- Supported by NABs across Europe, including IARSM
- Anonymous survey is underway

# The study is centered around a survey among accredited CABs

- How <u>digital mature</u> are the Conformity Assessment Bodies?
- What <u>motivates</u> them to introduce digital technologies and processes?
- What <u>impacts</u> do they realize through digitalization?
- How is their <u>benefit perception</u>?
- Which <u>obstacles</u> do they encounter?
- How can digitalization be <u>supported</u>?
- Which digital <u>technologies and processes</u> are in use in testing, certification and inspection?
- Which ones are planned to be implemented within 5 years?

# Future challenges and projects

- Increasing IT security in line with the latest European and world standards
- Personal data protection law (GDPR)
- Software for approving and signing documents
- Full implementation of web portals that will serve for overall communication with CABs and assessors

# Future challenges and projects

- Adaptation of national accreditation legislation related to the digital transformation of IARNM
- Introduction of business rules in the digital process of accreditation
- Increasing the automation of accreditation processes

Thank you for your attention!