



## OFFICE OF THE CHIEF ARCHIVIST OF LITHUANIA

# Electronic Archive Information System (EAIS) for electronic records and archives

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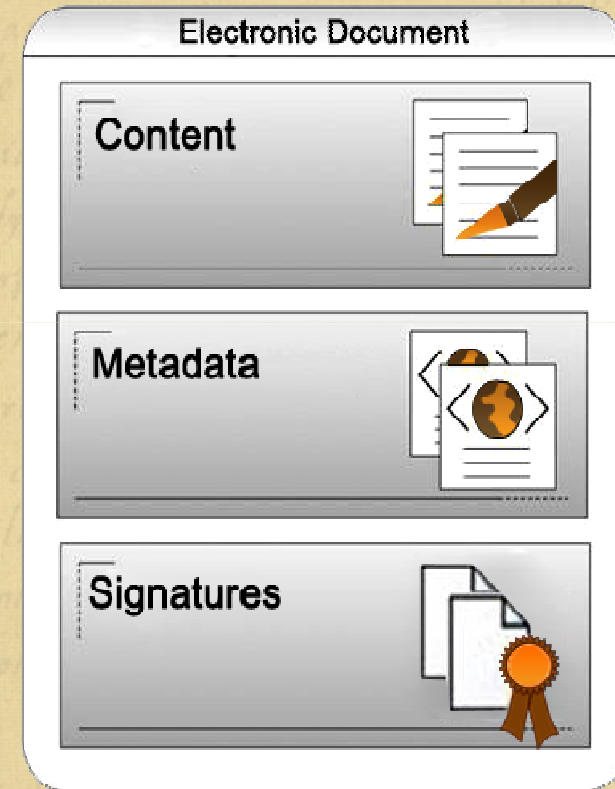
## E- DOCUMENTS ARE AN INTEGRAL PART OF THE STATE INFORMATION RESOURCES

- The orientation of the policy of the Government of the Republic of Lithuania in the field of e-government and e-services is posing and will continue to pose new challenges related to the regulation of electronic document management, the practice of their management, and long-term preservation of the documents.
- The current policy of Lithuania in the field of archives policy and the priority directions of its implementation are closely associated with the search for solutions of electronic document management and its implementation.
- Applying of information and communication tools in the management of organizations has caused the appearance of e-documents.
- Information in e-documents is recorded in an electronical way and is available only using the corresponding software and hardware tools.
- As well as other forms (e. g. paper documents), e-documents are managed in accordance with the same theoretical and methodological regulations.



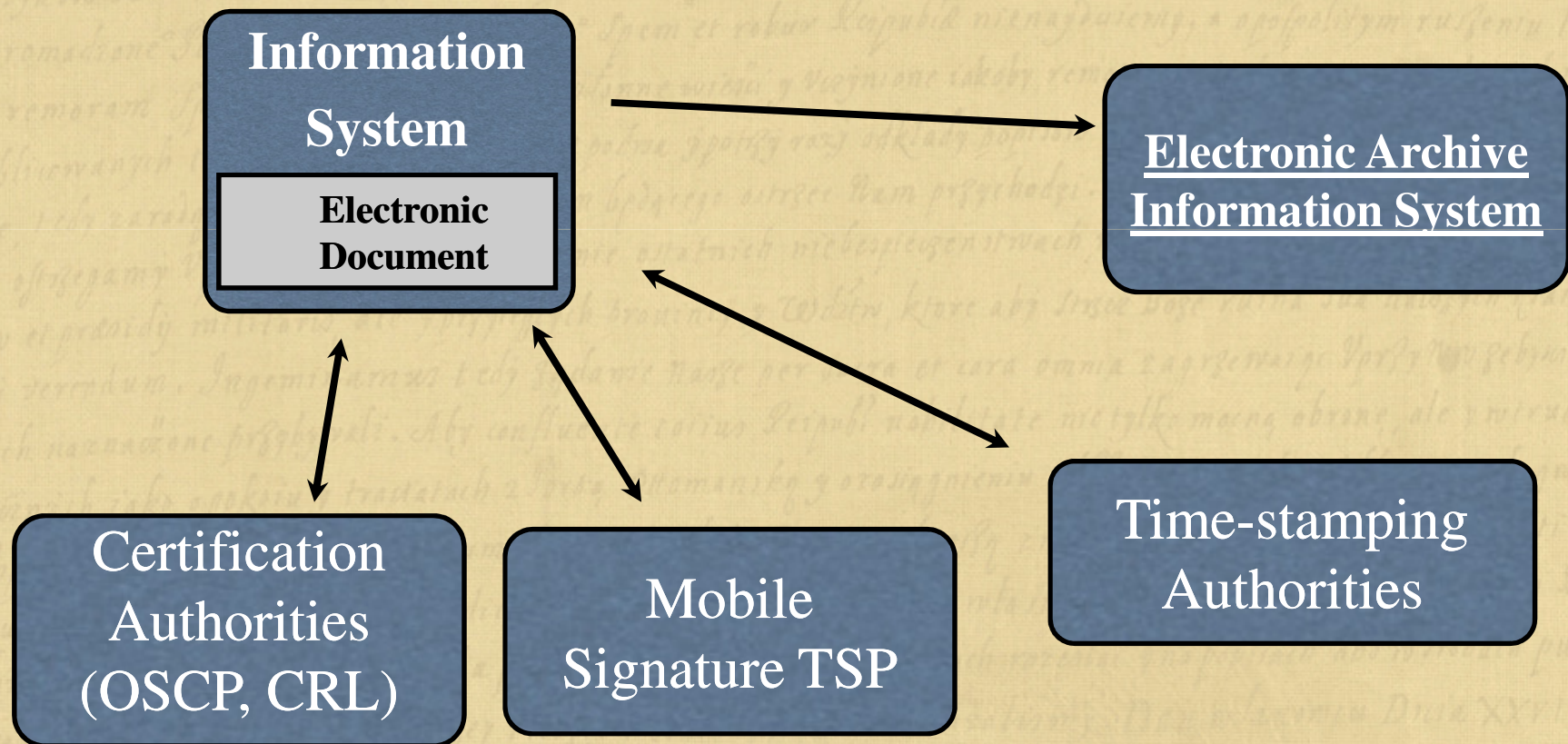
# BASIC DEFINITIONS OF LEGAL ACTS RELATED TO E-DOCUMENTS MANAGEMENT

- ❑ **E-document** means a document created, approved or received by legal or natural person using measures of IT and signed with legally approved electronic signature, in determined order established by legal acts.
- ❑ **Content of an e-document** means a part of e-document where information in textual, visual or any other form is presented, except metadata and electronic signatures of an e-document.
- ❑ **Metadata** means structured data, describing the e-document structure, environment and management through the lifecycle.
- ❑ **Electronic signature** means data, which are inserted, attached to or logically associated with other data for the purpose of confirming the authenticity of the latter and (or) identification of the signatory.





# INFRASTRUCTURE



# FROM LEGISLATION TO APPLICATION

## Legislation

Specifications

Regulations

Laws

## Application

Services

Information systems

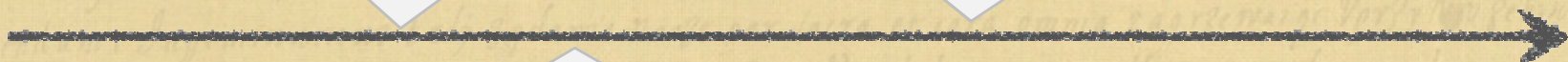
Libraries & products

Trusted  
service  
providers

Certification  
authorities

Authorities

Infrastructure

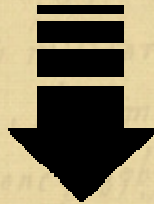




# E-DOCUMENT MANAGEMENT SYSTEM

(a system means the institution's document management system operating on the basis of information technologies and dedicated to create, register, arrange, preserve and destroy e-documents)

**COMPUTERISED DOCUMENTS  
MANAGEMENT SYSTEM**



**E-DOCUMENTS MODULE**

- E-document management throughout the whole lifecycle (creation, arrangement, storage and destruction) is carried out into the e-documents management system;
- Many Lithuanian public sector institutions have computerised documents management systems and use them for paper documents registration, digital copies of official paper documents management and rarely for management of e-documents;
- At that moment more than 200 public sector agencies had applied computerised documents management systems for management of ADOC format e-documents;
- Interoperability of the ADOC format e-documents enables the transfer of the e-document created in one system into any other system, where it can be verified for authenticity and suitability for the long-term preservation, if the software of these two systems corresponds to the requirements comply with ADOC specification.



# THE MANAGEMENT OF E-DOCUMENTS IN LITHUANIA 1

## CREATION

### SET REQUIREMENTS FOR E-DOCUMENTS SPECIFICATIONS

**Specification** – is a document which prescribes technical features of the e-document signed by electronic signature as well as its characteristics and functions.

**There are three of them:**

**ADOC V1-0**

**MDOC V1-0**

**EGAS V1-0**

**PDF-LT-V1.0 (PROJECT)**

## ARRANGEMENT

**Electronic file** means a file of e-documents as well as associated information structured according to certain criteria.

E-documents of institutions are managed at a file level.

Those documents are assigned to a certain file according to the preservation period provided.

Having finished e-files they are included into the determined inventory.



## MORE ABOUT ADOC FORMAT E-DOCUMENTS

- ADOC specification is approved in 2009 by Office of the Chief Archivist of Lithuania and it is:
  - Mandatory for government institutions;
  - Recommended for civil and business use.
- Defines *electronic document* model:
  - ...for human readable documents
  - ...based on open international standards
  - ...independent from software vendors

Awarded Lithuanian Strategic Innovation of 2010

Specification in English is available

□ [https://signa.mitsoft.lt/static/signa-web/webResources/docs/ADOC\\_specification\\_approved20090907\\_EN.pdf](https://signa.mitsoft.lt/static/signa-web/webResources/docs/ADOC_specification_approved20090907_EN.pdf)



# THE MANAGEMENT OF E-DOCUMENTS IN LITHUANIA 2

## PRESERVATION

- An institution should ensure that both the content of an e-document as well as the metadata will be read during the whole period of the document storage, and that it will be possible to check the qualified electronic signatures.
- In the institution spare copies of the e-documents should be made as well as spare copies of the data related to them, by transferring the data from the main media into other media.
- In order to preserve e-documents the following actions can be performed: refreshment, replication, repackaging, reversible transformation or making converted copies (signing them using electronic signature).

## DESTRUCTION OR TRANSFER

- In the institution the documents are kept for the definite time (10 or more years). The documents for repeal are selected only after the period has expired.
- In the institution organizational and technical measures should be foreseen to ensure that all the e-files, their volumes, e-documents as well as their spare copies chosen to repeal would be completely destroyed and it will be impossible to be restore them using standard or special data recovery tools.
- Public sector institutions (about 700), that make permanently preserved documents transmit permanently and long-term preserved documents to the state archives. Other institutions shortly and long-term preserved e-documents should store themselves.



## E-DOCUMENTS TRANSFER TO THE STATE ARCHIVES

- ❑ Regarding to the Instruction on electronic documents transfer public sector agencies should:
  - transfer e-documents to state archives over 5 years since e-files have been completed;
  - transfer e-documents using electronic communication channels (through EAIS) or in physical media (CD, DVD and etc).
- ❑ E-documents should be transferred by packages. Transfer package means e-documents and information related to these documents.
- ❑ Recently public sector agencies can transfer e-documents in ADOC or EGAS e-document formats to state archives
- ❑ Before receiving e-documents, state archives must assure whether all e-documents indicated in inventories exist, verify whether e-documents comply with concrete e-documents specification requirements as well as verify their content, metadata and electronic signatures and etc



## PRESERVATION OF E-DOCUMENTS AND *ELECTRONIC ARCHIVE INFORMATION SYSTEM (EAIS)*

□ Lithuanian state archives have an integral EAIS, which is ready for accepting and storing electronic documents of National Documentary Fond, providing a legal access to the stored documents using IT and providing electronic services.

■ A unique information system make it possible to submit to the state archives the e-documents signed by e-signature, assuring their integrity, authenticity, confidentiality and possibility to use and store them a long or unlimited time.

□ The possibility to use e-documents unlimited time is assured by converting their contents into long-term storage files (PDF/A format) and formats for previewing the documents in internet (PNG and JPEG). In the future these formats will be regularly reviewed and updated.

□ E-documents are physically stored in two geographically remoted electronic archive data centres (one in Vilnius, another in Šiauliai)

□ Software tools of free accessibility for preparation of official e-documents, signing them by e-signature, preview, and verification was developed

< <https://signa.mitsoft.lt/signa-web/app/index.html/ln/en> >



## **EAIS MODULES (<http://eais-pub.archyvai.lt/eais>)**

### **❑ MODULE OF DOCUMENTS MANAGEMENT SUPERVISION**

It provides the possibility for public agencies to coordinate registration data (documentation plans, inventories, etc. with state archives)

### **❑ MODULE OF ELECTRONIC DOCUMENTS TRANSFER**

It performs and manages transfer of e-documents from public agency as well as acceptance of these documents in state archives. State archives will be informed about intended documents transfer. State archives are going to conduct verification of received documents, make decisions on their acceptance, organize their incorporate into storage

### **❑ MODULE OF DOCUMENTS PUBLICATION AND PRESENTATION**

It is designed for information about preserved documents as well as their publicity. System's users will be able to search and review documents

### **❑ MODULE OF ELECTRONIC DOCUMENTS STORAGE**

It is designed for physical preservation of e-documents, timely their content transformation to formats suitable for long-term preservation, repeated archival statement and for conducting of other functions

### **❑ MODULE OF ADMINISTRATION**

It performs administration of the system (arrangement of configuration, sizes of users or agencies)



# PRESERVED OBJECTS IN EAIS

## The objects of Electronic Documents Repository

### Original electronic documents

Permanent storage

Long-term storage  
(26-100 years)

### Transformed copies of electronic documents

Converted content of electronic document into long-term storage files (PDF/A-1 format) signed by electronic signature

Converted copies for usage outside the system

Converted electronic documents copies for previewing on the Internet (PNG and JPEG formats)



## MANAGING E-DOCUMENTS IN LITHUANIA THERE SHOULD:

- ❑ Be more coherent intersubject and interinstitutional cooperation in the sphere of e-signature and e-documents.
- ❑ Be the specification of e-documents applying range defined (how many of them might be).
- ❑ It is also necessary to ensure the exchange of ADOC and other specification e-documents with other EU states.



# QUESTIONS ?