

# **Acquisition of Electronic Records and the Development of Finding Aids in the State Archives of the Russian Federation**

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Dear colleagues,

My presentation is devoted to acquisition of electronic records and improving of finding aids in the State archives of the Russian Federation.

Acquisition sources of the State archives are 275 federal executive bodies and their subordinate organizations, main news agencies such as ITAR-TASS agency, public organizations and many others agencies located in Moscow. Information technologies in all of them are mainly represented by electronic record management systems, various databases on main activities, electronic archives of digitized images of archival analog records. Some of organizations have huge amount of photographs and video records such as ITAR-TASS. The State archives work with public organizations mostly, but we also acquire such electronic records of personal provenance as videos and photos.

Since the end of 1990s the State Archives of the Russian Federation began to study implementation of IT in record-keeping in sources of acquisition of the State archives. This activity mostly includes:

- questioning of sources of acquisition since 1990s
- tracking presence of electronic records in legislation and retention schedules
- tracking presence of electronic records during consulting or visiting organizations.

Ministerial archives are not ready yet to preserve electronic records as usual. Most electronic archives, as a rule, are represented by digitized copies of documents of both permanent and temporary storage on paper.

In 2002, the State archives were ordered by Government of the Russian Federation to acquire digital images of all-Russian Population census of 2002 for more than 145 million people. It was supposed to be the first acquisition of electronic records in the State archives.

The main problem the State archives met that time was almost absolute absence of regulations in this area. We simply didn't know how to perform this task. Now in 2018 we still have almost the same problems with regulations in this area, but we've already got some experience which helps us today.

In 2010 the State archives acquired first electronic records, three databases and set of digital images of all-Russian Agricultural Census of 2006. The digital images of all-Russian Population Census were acquired in 2011. The acquisition of electronic records is in progress. Right now we are going to receive images of another all-Russian Agricultural census, population and industry censuses, spreadsheets containing all-Russian statistics for recent years, different state registries, electronic records on conducting the Winter Olympic Games in Sochi in 2014 and some others.

All the electronic records we've already acquired are standalone documents, which were delivered to us on various media, mostly on DVDs. We ask organizations to make two identical copies of electronic records on separated media for us. These copies are kept isolated from each other in two our buildings in Moscow. Two robotic libraries for online and offline storage of optical media were purchased in 2008, but now we aim to preserve electronic records in storage systems using hard drives and magnetic tapes. For this goal we have a rather simple storage system which is used to make third copy of electronic records stored in the State archives. We make new copies of electronic records while verifying readability of media and authenticity and integrity of electronic records. Also a data-center will be

built in 2022 for 600 Petabytes and we will be able to acquire electronic records by intercepting-protected channels.

Electronic records we've already acquired are mostly presented in form of databases, spreadsheets and multimedia. Also Russian official statistics are presented with digital images of census schedules, and these images are not just TIFFs or JPEGs or PDFs, they need their own viewing software.

We do not acquire record-keeping systems as archival documents right now because they do not contain permanent storage electronic records yet. For us it's rather good at this moment because systems in use are not designed for archival preservation. But this situation will change soon due to the plans of the Russian Government to move to paperless record-keeping. Right now the State archives works with our acquisition sources to get ready for it. One of the steps is to acquire digitized copies of analog records of permanent retention and their metadata from record-keeping systems and archival information systems to find out how these systems must be improved to meet our requests. This step helps us to improve finding aids of the archive because there are more than a million of case files with analog records of permanent storage which are temporarily kept in ministerial archives. It will be very complicated task for the State archives to digitize these documents after acquisition. In 2019, the Standard functional requirements for record-management systems and migrating from them to archival storage systems for electronic records in agencies will come into force. We hope that these requirements will help us to acquire data from record-keeping systems and archival storage systems successfully.

Also we acquire record-keeping systems from disestablished organizations in case these systems contain records of permanent storage. This situation is very complicated because these organizations at the stage of abolition don't have specialists, money and time to prepare electronic records for archival preservation. Also legal issue on rights for software is one of the problems we meet. Even if an organization is ready to give us all the software which they used, we don't have

regulation on licensing it. In such cases the State archives can take record-keeping systems and electronic records, databases AS IS. The senior authority in the archival system of Russia is the Federal Archival Agency and we urge it to take steps to solve this problem.

Another problem encountered by disestablished organizations is that electronic records can be transferred to the State archives in dozens of formats and on various types of media in disordered state. So now our archivists have to arrange case files, make archival inventories and preserve these records in any way. For example, from the Sochi 2014 Organizing Committee, the so-called “intellectual activity results”, or reports on completed contracts, were taken AS IS. They include photo and video documents, TV broadcasts, designs of logos, emblems and uniforms, websites, various text documents on flash drives, CDs and DVDs, hard drives. In addition, there are also audio and video tapes. We`ve got 10 Terabytes of various data to appraise and to preserve.

In order to avoid such situations, the State archives work with organizations in order to prepare electronic records in advance for transfer to state storage in orderly state, in agreed formats, with archival inventories and finding aids.

The form of archival inventory has changed since 2009. At first we tried to put into it as much information about electronic records as we can. The modern form of inventory is supposed to remain almost unchanged even if we convert files to new formats or migrate records to new systems or move to new media etc. It contains numbers and names of case files, their covering dates and its size in kilobytes. Yes, the latter is a weak point, we know it.

The final notation under inventory table indicates the number of case files, electronic records and computer files, the volume in bytes and megabytes, the number of documents by their type.

An important role is played by the preface to the inventory. It contains description of electronic records, history of their creation and use, structure and

formats of data, description of preparation for transfer to archival storage and other information that will help to ensure their further preservation and usage.

Archival inventories also have certificate sheets - they serve to “certify” the computer files of electronic records and case files, and contain such information as the date and time of the last change, volume and checksums (md5, sha-1 or both at the same time for now), file formats. Certificate sheets allow us to confirm that the files acquired and preserved remain complete and authentic (until the first conversion, of course). Checksums are used as a replacement for electronic signature and as a control data while checking integrity and authenticity. Certificate sheets are kept as electronic and analog documents, the latter with handwritten signatures of a compiler of sheet and a head of the organization.

Some words about usage of electronic records. As usual the most popular are two databases – on victims of World War II who received money from the Germany (the Russian Foundation for Mutual Understanding) and on licensees in building and constructing businesses (Regional Development Ministry).

The first one we acquired in original (Interbase) and in agreed (Ms Access) formats and as a virtual machine. A simplified database in the Access format was used to prepare 55 archival inventories of cases files. This made possible to significantly reduce the time and labor costs for the description of almost 512 thousand cases files of applicants for financial compensation for slave labor and their heirs. The database of the Foundation in the original format is used when performing social and legal requests; a virtual machine was created for this.

The latter one was acquired from liquidation commission on PC. We`ve made case files with the databases, distribution package and help files so as not to depend on the aged PC.

The other electronic records are not in use mostly because of personal data they contain.

The absence of a working information system for storing and using archival electronic records makes it difficult to use records in other formats. Access to records containing personal data such as of census schedules is also restricted.

Despite all the difficulties, we hope to preserve the documentary heritage in the form of electronic records. The international experience that we have learnt at previous conferences ICERMT is already used in our work.

Thank you for the opportunity to learn something new and useful during the current conference.