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Some Problems of Safety Preservation of the Russian Archival Records

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In the modern world when information acts as the most powerful resource of the influence on the global development the Archival fond of Russia is among the objects of high danger. There are the following threats which damage the safety of archives and demand the immediate decisions:

- *maintenance of physical safety of fonds and records;*
- *maintenance of protection against thefts and the non-authorized access;*
- *maintenance of protection against external threats (fire, flood, earthquakes and other extreme circumstances);*
- *physical preservation of the Archival fond of the Russian Federation originals paper records.*

The effective and acceptable at cost system of archival records protection against threats should combine various means and methods. The basic methods of protection are presented in the report.

LARIN, Michael - EGOROV, Sergey, *Alcune problematiche nella sicurezza della conservazione della documentazione degli Archivi russi. Atlanti*, Vol. 18, Trieste 2008, pp. 79-86.

Nel mondo attuale, dove l'informazione è la più potente risorsa per influenzare lo sviluppo globale, i fondi archivistici russi sono fra gli oggetti a più alto rischio. I seguenti rischi danneggiano la sicurezza degli archivi e richiedono urgenti decisioni in merito: mantenimento della sicurezza fisica dei fondi e dei documenti;

- *mantenimento della protezione contro i*

Introduction

The Archival Fund of the Russian Federation is national property of the Russian people. It contains global information on the state, economic, social and cultural life for the thousand-year Russian history.

Now when the information acts as a main resource of development, the Archival Fund of the Russian Federation was included into the objects of increased risk zone. At the Parliamentary hearings "The Problems of safety, acquisition and use of the Archival fund of the Russian Federation" (1999), the questions of "Preservation of the national cultural and historical memory. Libraries and archives of Russia" (2003) were considered within the problem of national security (1999, 2003). Easing of the state influence and control in formation, storage and use of the retrospective information in government, science and culture development, increases risks of the threats connected both with physical losses and illegal use of archival records and information. This situation does not meet the state interests and breaks human rights.

As a matter of fact the concept "safety of archival records" has no definition. And it is also absent in the dictionaries of modern archival terminology. At the same time in the archival organizations practice the archival records preservation is an independent trend. It is "a complex of actions on normative conditions creation, observance of the normative modes, and appropriate organization of the archival records storage and providing their keeping in normal physical condition excluding their theft and loss".

The main tasks in this field of archives management are solved by means of optimum storage of records on any carriers (paper, film, electronic etc.) and neutralization of possible threats of their loss.

So, records storage includes the work on repositories provision, control of the archival funds and records. The threats neutralization is provided with the permanent control of keeping the rules on records preservation by means of the records existence, state and tracking for demagnetizing of electronic and phonotapes. It is important to keep the regime of records storage and eliminate biologi-

cal destroying factors in time.

Since the middle of the 1960s the microfilming of the most valuable records appeared in Russia. The security copies of originals are created, the security fund (microfilms are transferred in the closed removed repositories) and the fund of records use (in reading rooms) are formed. The records conservation (conservation and restoration processing of films and microfilms, lamination) is developing.

All these measures mean the achieved level of the Archival fund of the Russian Federation preservation. However, in practice there are serious shortcomings and the archival institutions are faced with records loss.

Physical preservation of funds and records

The threats in this trend are caused by the following factors:

- lack of budget;
- lack of space (construction, repair, reconstruction and etc.);
- lack of personnel;
- low rates of restoration;
- elimination of regulation and control system in records and archives management at institutions, organizations and enterprises.

The questions of records restoration, concerning the fading of records texts are very actual now, especially the records, created in the period of the first decades of the Soviet power because of poor quality of paper and dyes.

Thus the necessity of restoration creates new threats of records preservation as the restoration is made by foreign organizations. Owing the growth of works on records copying with the newest duplicating machines the experts come to the conclusion that there will be new threats as the result of harmful influence of copying, reprography, electro copying etc. on the material basis of the record.

External threats

There are other threats:

- fires;
- flooding;
- earthquakes;
- other catastrophes.

According to the Rosarchiv data the fire-prevention conditions of some archival institutions do not still meet the appropriate requirements.

There is significant physical and moral wear and tear of fire-prevention safety means in some state archives. The normative terms of fireproof steep of wooden constructions and shelves are not provided in many archives. Only a few archives are equipped with the ef-

furti e gli accessi non autorizzati;

- mantenimento della protezione contro pericoli esterni (fuoco, allagamento, terremoti ed altre calamità estreme);

- conservazione fisica dei fondi archivistici dei documenti cartacei originali della Federazione Russa.

L'effettivo ed accettabilmente costoso sistema di protezione dei documenti archivistici contro i rischi dovrebbe combinare vari mezzi e metodi. I metodi di base per la protezione vengono presentati nell'articolo.

LARIN, Michael - EGOROV, Sergey, Seznanitev z nekaterimi problemi o varni zaščiti arhivskih dokumentov v Rusiji. Atlanti, Zv. 18, Trst 2008, str. 79-86.

V sodobnem svetu so informacijski predpisi med najvažnejšimi sredstvi, ko gre za temeljno zaščito dokumentov, kar se tudi v arhivskih fondih v Rusiji odraža kot dejstvo, da je arhivsko gradivo lahko podvrženo veliki nevarnosti uničenja. V nadaljevanju so prikazani postopki, kako zagotoviti varnost arhivskega gradiva, da se ne bi uničilo:

- vzdrževanje fizične varnosti fondov in dokumentov,

- vzdrževanje zaščite pred krajo in nezaželeni uporabi arhivske dokumentacije;

- vzdrževanje nasproti zaščite prek zunanjimi katastrofami kot so poplave, ogenj, potres in druge ekstremne okoliščine;

- zagotovitev fizičnega varstva arhivskih fondov ruske federacije na področju originalnega gradiva.

Za zagotavljanje naštetega se je treba tudi ozirati na učinkovitost in cenovno višino, še posebej kadar gre za krajo arhivskih dokumentov, da se pri tem uporablja kombinacija naštetih metod in postopkov. O vsem tem pa so prikazani problemi in odgovori nanje v pričujočem prispevku.

fective systems of fire-extinguishers.

The fire-prevention measures in municipal archives are of great concern. In forty three regions (50 % from the general number of subjects) the number of the fire signal systems does not run to 50 ¹.

There are some examples of fires in the archives:

1996 - a big fire in the building of the scientific library of the Main observatory of the Russian Academy of Science in Saint Petersburg. The personal fund of the first director of the Pulkov observatory an academicians V.J. Struve, dating to the early XIX century, was seriously damaged.

1996 - the reading room of the Chekhov library in Moscow was flooded

2000 - sparking in the building of the Samara branch of the Russian state archives of the scientific and technical documentation.

2002 - a fire in the State archives of the Orenburg area.

Big fires were taken place in the archives of Saratov, Kostroma.

The ways and means of threats neutralization are the following: creation of security fund, preparation of records for evacuation, development and realization of a complex of storage isolated ways, creation of archival complexes security copies, installation of special guard systems.

The Program "The improvement of fire-prevention measures in the federal state archives" and also the new Instruction on fire-prevention safety of archives are to solve the problem of the archival records destruction because of fires.

In some archives the repair and modernization of fire-alarm systems (the Bryansk, Kursk, Orel, Tula, Yaroslavl' areas) was carried out. In the state archives of Lipetsk, Tver' areas the fire-prevention devices "Signal - 20" were established. The system allows to carry out the protection and automated fire-extinguishing even in case of electric power switching-off. The state archives of the Kostroma area is equipped with the devices of new generation. And there are detection, notification and fire extinguishing systems in four municipal archives of this region. All fire pipelines were replaced in the Moscow archives.

The work on improvement of fire-prevention safety of the archives in the Vladimir, Ivanovo, Kostroma, Kursk areas is very effective.

Theft and disclosure of the archival information

This complex of threats includes:

- theft of archival rarities, personified information and other groups of unique and especially valuable records;
- unauthorized access to the archival repositories;

1. The report of E.N. Popova, *Modern state and problems of records preservation in the state and municipal archives.*

- unauthorized access to the databases, archival information on electronic carriers;

The basic places of threats are the following:

reading rooms;
archival repositories;
places of restorations, records exhibitions;
lines of archival files deliveries.

The problem of deliberate theft of archival records up to the middle of the 1970s practically wasn't taken into account and it was only realized in the records preservation field. Its solution was in creation of the appropriate normative records storage conditions (space, temperature and humidity regime, fire-prevention and security signal systems and etc). For the first time this problem appeared in the connection with the revealed theft of historically valuable records in the Central State Archives of Historical Acts and the Central State Archives of Sound Recordings of the USSR in the 1970s.

As a result of the control realized by Glavarchiv of the USSR in 1976-1977 the facts of theft in the archives of the USSR were found out. The questions of responsibility, professional training, moral qualities of personnel, official responsibility of the funds keepers became actual to the state archival service. Almost a quarter of century has passed since the problem of theft was put on the agenda of the archival service. However, its solution now is far from being perfect.

The objects of theft in the archives are the complete storage units (files, albums, books etc.), separate records and even their parts-marks, stamps, seals, autographs etc., that also complicate revealing of the stolen objects, their protection and search. In some cases thefts are organized by the criminal groups. The significant part of archival records is kidnapped with the purpose of their export abroad and the subsequent sale.

The ways of theft neutralization are the following: creation of the effective normative and methodical regulations on the work with funds and also the use of special protection means.

Legislation

The basic normative acts on the questions of records theft in archives and unauthorized use of information are the following: the Federal Law (FZ) "About archives management in the Russian Federation" from October 22, 2004 N 125-FZ, the Criminal Code of the Russian Federation, the Federal Law "About information, information technologies and information protection" from July 27, 2006 N 149-FZ, the Law of the Russian Federation "About personal data" from July 27, 2006 N 152-FZ.

According to the Rosarchiv data the positive tendencies in the decision of problems, concerning records preservation in the state and departmental archives within the new legislation were outlined. So, if in the 1990s of the last century no one special construction was built. But by the end of the period many buildings of the former scientific and industrial institutions were transferred for the needs of

regional archives. The work with the unique records, creation of special conditions of their storage and control, guarantees of the safety of this most valuable part of the Archival fund became more active. The safe storage, certification of the unique records, the centralized control of material enclosures in the files composition are improving. In order to realize special control of the unique records of the Archival Fund of the Russian Federation the work on inclusion of a complex of such records into the State register is carried out.

Many administrative archival bodies use these legal records for strengthening the material and technical base of archives and increasing records safety very successfully.

Methods of archival records protection

The current state of the archives technical equipment, providing the threats neutralization is not satisfactory. It mostly concerns the threat of theft and the archival information disclosure because of the high costs of the records protection means which restrain their universal application.

So, now the search of effective protection systems acceptable in cost by means of various means and methods combination is going on. It is necessary to use an individual complex of protection means for each potential threat places.

The greatest threats are taken place while a record is in the reading room. At this level of its life cycle it is necessary to apply a complex of technical means providing the best level of records safety and preservation. The next kind of threats is a process of records transfer from the place of their permanent storage (from archival repositories) to the other - additional branches of archives. In order to save the records at this stage along with the use of individual means and methods of records protection the devices of records group protection - special transport containers should be used. The longest stage of keeping a record in the archives is in its existence in the archival repository. The technical equipment used here, the normative and methodical regulations on the archival personnel activities, are to provide the maximal safety of records. The strict keeping of norms and rules must be under the constant control of the appropriate officials with the aim of preventing records thefts from the archival repositories. For the effective fulfillment of these norms and rules it is necessary to use the special means for the control of the records existence, automation of the records delivery and receipt in the archival repository.

The technical means for the records protection from thefts can be divided into three groups:

- means allowing to fix the record theft during its removal from the protected space;
- means for the records protection against their substitution and providing evidence of the records belonging;
- means for exposing the criminals even if he or she already managed to steal the record.

The devices of the first group are the following: video cameras

for control in real time. This kind of protection means the installation of video equipment in the reading rooms and other adjoining rooms, and also presence of the central control panel of video supervision. Such devices while monitoring in real time regime effectively allow to prevent thefts in the reading rooms and repositories when there are no many visitors. And the video recordings made by them can be the proof of the crime.

The signal devices (sensing elements), attached to the protection object and the special equipment reacting to the signal of the sensing element can be referred to the same group. While taking a record equipped with the signal device out past by the turnstiles the signal system is switched on. This kind of protection can be effective for the prevention of thefts committed by visitors of the reading rooms.

The other kind of signal devices are the sensing elements attached to the shelving drawers or the records covers. The signal system works while extracting a drawer with the records from the shelving or a record. Such kind of protection provides the safety of the valuable records which rarely leave the repository.

For fixing the fact of theft the various seals are used. The use of seals allows to find out the facts of records containers opening. Such kind of protection means the daily control of the seals integrity by the archives employees and also the existence of video supervision.

And besides the protection means promoting to catch the criminals red-handed there are methods of latent marking of the records in order to define precisely the belonging of this or that record to the certain archives and its authenticity. These are the following:

Colorless ultra-violet (uv) markers. The labels made by the uv-marker are not visible to the naked eye and they are shown only in the ultra-violet beams. It is impossible to confuse and it is difficult to change the objects marked with the uv-marker.

The isotope labels are the micro-dozes of isotope substances putting on the record. The isotope mixture can be added to the printer ink marking on the bar code to the packing, to the paper of the labels etc. This method is called as isotope bar-coding and allows to put on the record the identified information. The isotope bar-coding greatly increases the degree of records protection as it is practically impossible to forge it.

For latent marks the watermarks, disseminations, micro-strings, tablets, color grids, magnetic paints, holograms are also used.

The interesting method is the latent marks of records the traces of which remain on the hands or clothes of the criminal and can form the basis for his or her detention and the proof of his or her fault in court. Marking is the painting chemical traps meant for detection of the person who has made illegal actions (theft, unauthorized penetration into the rooms).

Among the chemical traps there are the means of active protection. The chemical traps with the painting components emission or dye and tear gas are designed for revealing theft and in some cases for

preventing the attempts of unauthorized access to the protected objects. The emission of the difficultly washed off painting components or tear gas is made with the help of tiny pyrotechnic charge actuated by the trigger mechanism of electric and other actions. Some chemical traps are in addition completed by sirens and smoke cartridges increasing the efficiency of catching the criminal.

In the modern archives the information technologies are more and more used for the archival records safety.

First, it is the creation of the uniform control system for the archival records on the basis of bar-coding. It is made as follows: the unique bar-coding is pasted on each record (or file). And the scanners of the bar codes are put on all the points of records movement.

It allows to solve a complex of problems effectively:

- labor productivity is increased due to the automation of the readers service in the reading rooms and the archival fund control;
- convenient methods of making an inventory;
- simplicity of records movement keeping.

Second, it is creation of the electronic records copies which are accessible to the visitors of the reading rooms. Thus, the threat of records theft is excluded from the reading rooms. These methods are used in some federal archives. For example, in the State Archives of the Russian Federation a hardware-software complex of control and tracing of records movement, using the bar-coding technology, is putting in force. The introduction of this complex will greatly improve the process of the records control, their search and tracing.

The control of the visitors in the reading rooms is intensified. In many archives the work on installation of the video supervision systems is carried out.

The informatization of the archival activity is a serious guarantor of the records safety in the archives. At the same time while transferring records into electronic ones there is a new kind of threats such as the unauthorized access to the information. The legal and methodological questions concerning information systems, the Internet and databases are developed very poorly. Therefore the archival information systems protection should be thought over not less than fire-prevention measures or theft protection.

Conclusions

The preservation and protection of the information of the Russian Federation Archival Fund are very important tasks of the state. Its solution is in providing a combination of legislative, organizational, technical and technological measures. Each of the mentioned above groups of threats needs the complex special thinking and development of the neutralization measures. The modern normative acts and state programs must neutralize these threats in part.

For solving the problem of the archival records safety it is necessary to take into account the increased external and internal risks,

extreme situations, natural catastrophes, acts of terrorism, thefts etc. These threats can be subdivided into the internal threats, connected with the physical state of archival records; external threats, connected with various natural catastrophes and the “human factor” threats such as records thefts and the unauthorized access to the information.

The application of various means of archival records protection is effective only in case of a complex approach with the use of organizational measures on the basis of the perfect legislation and with the strict fulfillment of the working rules in the archives.

A complex of electronic records is of special concern. The new technologies create non-standard threats to the archival information safety. Their liquidation also should be based on the technical decisions according to the type of information threats.

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