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**PROTECTION OF CULTURAL PROPERTY IN MUSEUMS THROUGH THE
TASKS AND WORK OF THE PROTECTION AND RESCUE HEADQUARTERS**

Abstract:

The protection of tangible and intangible cultural assets is one of the priority tasks and duties of museums. There are different types of protection of cultural assets in the museums: protection from decay and destruction of materials, protection from theft, protection from disappearance, etc. In addition there are also other types of protection of cultural assets, which are of great importance. These are: protection of the cultural assets during military situations and protection natural disasters (fires, floods and earthquakes). This type of protection in the museums is realized through the Protection and Rescue Headquarters which should be trained for this type of protection. Any institution which deals with cultural heritage has to have a Protection and Rescue Headquarter. This paper will cover the structure of the Protection and Rescue Headquarters as well its goals and tasks within this type of protection of the cultural assets.

Keywords : natural disasters, floods, museum, protection, material goods.

According to the Law on Museums, museums are the institutions that, among other things, are responsible for the care and protection of museum objects: "Museums carry out research, acquisition, arrangement, professional and scientific processing and study, protection, storage, publication and presentation of museum objects" (2004 Law on

Museums: <https://is.gd/PLT5bb> . This law has also had its amendments and additions over the years, namely in 2008, 2010, 2011, 2015 and 2016: <https://is.gd/4xLOoo>).

The care of museum objects and their protection is of particular importance for their preservation and their further survival. The protection carried out by experts in museums which is regulated by the Law on Museums and the Law on the Protection of Cultural Heritage, refers to: restoration, conservation, cleaning, appropriate storage of museum objects in museum depots, with adjusted temperature and humidity, as well as appropriate care and protection of museum objects in museum displays. In addition to this type of protection, which is necessary for the preservation of museum objects, the care and protection also include appropriate documentation, registration of museum material in the entry book.

In addition to this type of care and protection that is carried out daily in museums, there is also specific protection of museum objects, which is carried out when necessary, in the event of war or a state of emergency. With them, but also with the situations of natural disasters, such as fire, flood and earthquake, of smaller scales, when a state of emergency has not been declared, there is appropriate protection of museum objects, of the type of evacuation.

Evacuation is a planned, organized and controlled movement of material goods from endangered areas to another safer place. That is, a location sufficiently distant from the existing and endangered location. The preparation of activities for the implementation of the evacuation includes organizational and operational measures and procedures:

- method of conducting the evacuation (gathering points, movement routes, number and type of means of transport, number and type of teams of experts for logistical support, necessary material resources, etc.);
- number and type of facilities planned for housing cultural goods;
- overview of the participants who carry out the evacuation; (list of persons preparing the evacuation of exhibits and other objects being taken to a new location and list of persons designated to receive them at the new location);
- deadlines for concluding necessary contracts;
- deadlines for replenishing the Protection and Rescue Forces participating in the evacuation with personnel and material resources;
- education, training and exercises, i.e. training with the persons who are expected to carry out the evacuation (Bogdanovski 2019: 63).

In accordance with the Law on the Protection of Cultural Heritage:

Cultural heritage in danger also includes assets that are exposed to increased danger that could have harmful consequences on their essential characteristics.

1. Outbreak or threat of an outbreak of armed conflict;
2. Natural disasters, especially earthquakes, floods, landslides, fires or progressive changes from geological, climatic and other natural factors (2004 LPCH: <https://is.gd/vQFCGA>).

Protection and evacuation of cultural property in museums, according to the Law on Protection and Rescue (2005 LPR with the Laws on amendments and additions over the years: 2008, 2010, 2011, 2014, 2015, 2016: <https://is.gd/F71ULu>), in such situations is carried out by the Protection and Rescue Headquarters, which is a mandatory body in

every museum institution: "The headquarters shall monitor the situation, coordinate activities and manage protection and rescue actions (2006 Decree: <https://is.gd/UrWliv>)". The members of the Protection and Rescue Headquarters are appointed from the pool of museum employees: "For the purpose of protecting and rescuing people and material goods from natural disasters, epidemics, epizootics, epiphytotics and other accidents, protection and rescue units and headquarters are formed "(Article 93 of the 2004 LPS and the Laws on Amendments and Additions over the years: 2008, 2010, 2011, 2014, 2015, 2016, <https://is.gd/F71ULu>).

The headquarters (hereinafter referred to as the PRH) consists of:

Commander of the PRH, with the following tasks:

- issuing an Order for the mobilization of the PRH and the Universal Protection and Rescue Unit;
- hold meetings of the PRH;
- form a group for accepting museum objects;
- undertake measures to accelerate mobilization;
- monitor the progress of the mobilization to the mobilization point;
- monitor the progress of the mobilization to the mobilization point ;
- coordinate the actions.

Head of the PRH, with the following tasks :

- in the absence of the commander to take over his work;
 - organize the work of the mobilization teams to the mobilization site and to set up security;
 - give instructions and monitor the work of the assistants:
- a.) Assistant to the Head for operations
 - b.) Assistant to the Head for urban and technical measures
 - c.) Assistant to the Head for humanitarian measures
 - d.) Assistant to the Head - administrator
 - e.) assistant to the Head - courier, driver
 - f.) commander of the Universal Protection and Rescue Unit
- establish contact with the Directorate for Protection and Rescue and request assistance if necessary;
 - prepare written reports;
 - participate in the preparation of orders, decisions, resolutions, etc.

Universal Protection and Rescue Unit (hereinafter referred to as UPRU), consisting of:

- a). the unit commander, who has the task:
 - upon a mobilization order, to report to the mobilization point of the Military Service;
 - to organize the UPRU for mobilization.

b). members of the UPRU, who are employed in the institution and who do not have children under 7 years of age (the number of members depends on the number of employees and the size of the institution).

The regular work of the PRH is:

- to continuously monitor the security situation in the museum;
- to hold regular meetings, to prepare minutes of the meeting;
- to prepare an Annual Safety and Security Plan;
- to issue an Order for taking preventive measures for fire protection during the summer period;
- to issue an Order for taking preventive measures in case of heavy snowfall and other natural disasters in the winter period;
- to prepare a Plan for the security protection of cultural heritage from illegal activities;
- to prepare an emergency action plan in case of illegal activities;
- to prepare a Protection and Rescue Plan;
- to prepare an Assessment (analysis) of the risks of illegal activities;
- to prepare Instructions on the manner of handling and use of the Protection and Rescue Plan;
- to prepare an Alarm Plan - method and procedures in case of an alarm signal;
- to prepare an alert order;
- to prepare an evacuation plan;
- to have a list of employees and a list of important telephone numbers;
- to properly install the fire extinguishers in the institution, to regularly check and maintain them, in accordance with the Fire Protection Law (2017 Fire Protection Law: <https://is.gd/I3CrV9>), to have a list of the number of fire extinguishers installed in the institution ;
- to take care of the correctness and number of hydrants in the institution;
- to take care of the placement and operation of the cameras;
- to take care of the installation and correctness of fire alarm systems.

The cultural heritage held in museums is extensive. Museum objects owned by museums, in times of war and emergencies, depending on the situation, cannot always be evacuated in their entirety. Therefore, in order to facilitate their evacuation, it is necessary to make a selection.

Therefore, museums should develop Priority Lists of Museum Objects for Evacuation. They list the most important museum objects, according to the valorization of the object, its value, age, and the significance of the object itself. In the list, museum objects must be listed with different ordinal numbers and therefore be evacuated at different times.

The disadvantage in this situation is that such Priority Lists are not prepared in all museums and their preparation is not (always) approached with seriousness and importance. Very often, experts, without prior assessment and analysis, prepare these lists, not understanding their great importance. Very quickly we can find ourselves in any emergency situation, which will find us unprepared to evacuate and protect our cultural wealth. This is a great negligence and mistake on the part of experts and the management

of museum institutions. Also, apart from negligence, many of the experts do not know and are not sufficiently educated in this issue. Therefore, in the future, greater attention must be paid to greater education on this issue, of the experts and in general of all museum employees.

All museums, and especially main museums, are obliged to raise awareness of the protection of cultural property in wartime and emergency situations through various programs, projects or lectures, because, in terms of all types of protection, the protection of cultural property in wartime and during natural disasters is one of the most important because then we are in a position to lose all our cultural and historical wealth if we are not prepared, educated and trained for it in a timely manner. Jovan Ristov (2018) also writes about this problem and states the same or similar conclusions within the framework of museum work for the period from 2006 to 2011. My analyses for the period until 2024 show the same thing. Unfortunately, there is not much progress in museum institutions on this issue, except, perhaps, a few experts who deal with this issue. But that is not enough. Higher authorities, which are involved in the protection of cultural heritage, must make a complete change in the way they treat this issue.

Another problem that runs through museum institutions and affects the protection and rescue of cultural goods is the valorization and revaluation of museum objects in museum collections:

In the past 8 years, since the Law on the Protection of Cultural Heritage has been in force, the process of revaluation and recategorization of public museum collections has not been initiated in 10 museum institutions (Ohrid, Struga, Negotino, Kavadarci, Veles, Sveti Nikole, Kumanovo, Kratovo, Shtip and Strumica). The other museums, those that existed at the time of the adoption of the Law (10), some more and some less, have carried out revaluation of all or only some of their collections. (Ristov 2013: 47).

The valorization of museum collections is of particular importance: for the collection itself, for the museum objects, for the institution and for the state. With valorization, museum collections receive a certain categorization of importance and value.

Museum collections are determined by categories. This also includes collections that are of particular importance. This is important because in the Priority Lists, the museum objects from the museum collection, which have the category of – particular importance, are listed first. However, even then it is goof to make an order of importance of the museum objects because, depending on the conditions, possibilities, the situation we are in, during those disasters, it is not always possible to evacuate an entire museum collection, which has a category of – particular importance, especially if the situation is life-threatening for the people who are performing the evacuation. Therefore, it is desirable that those museum objects be placed on the Priority Lists according to valorization, and the entire collection, which has a category of – particular importance, be listed.

In addition to accurate and precise Priority Lists, museum objects also need to have appropriate packaging for evacuation. For objects that have edges and lines, it would be good to have metal boxes in which they can be placed, according to their dimensions. Smaller objects or objects that do not have exact lines can be packed several in one box,

adequately protected from each other, so that they do not get damaged. Each box should contain a list with the name of the item, its entry and inventory number, and brief information about it.

The problem that arises, apart from the poorly compiled Priority Lists, and sometimes their non-existence, is the problem with the storage location of these items. They may be in the permanent displays, others are in different drawers and display cases in different places in the depots. Priority items placed in this way cannot be found, packed and evacuated very easily and quickly. (especially if it is a large and complex museum). It is best to pack all priority items and store them in one location. But here another problem arises. Museums do not have enough identical pieces or more similar museum items, some of which would be in the permanent displays, others would be used for temporary exhibitions and projects, and still others would be in the priority part of the depot because most often the most valuable and beautiful items are exhibited, to be presented to the public. Therefore, the process of protection and evacuation during natural disasters has its shortcomings, which we need to address in the future. Because depending on the situation during natural disasters and depending on their scale, it is impossible to evacuate everything and record it in the Priority Lists, especially if the object is large in size and area, and there are not enough people to evacuate. Also, in the PRH and the UPRU, the people who are trained, according to the number of employees and the size of the institution, does not mean that at a given moment all of them will be present at the workplace (they may be on vacation, sick leave, or are in the field, etc.). Intangible cultural goods are not included in the Priority Evacuation Lists in most museums, nor is this mentioned as a deficiency. The importance of documentation, films, field research and digitized materials is not seen everywhere. For intangible cultural goods, each museum should have a separate room prepared, where digitized materials will be stored, placed on a USB or on an external hard drive. There should also be several copies of them in other places in the museum because, especially in emergency conditions, cultural goods and documentation suffer the most:

When it comes to the emergency phase, taking into account the ten factors of destruction of cultural property, greater consequences for museum objects and documentation are expected. In such situations, rapid destruction of the property and sudden rapid destruction of documentation occur. (Bogoeski 2018: 83).

Protection and rescue of cultural property from fires, explosions and hazardous substances

What is a fire? It is a triangle of combustion, where there is a burning material, oxygen and sufficient heat. By removing one element from that triangle, the fire stops. But burnt museum objects cannot be restored. They are lost forever (Bogoeski 2019: 50).

Therefore, and according to the Law on Protection and Rescue (2004 LPR with the Laws on amendments and additions over the years: 2004, 2008, 2010, 2011, 2014, 2015, 2016, <https://is.gd/F71ULu>), museums are obliged to have: appropriate devices and installations for fire protection, fire-fighting equipment, fire extinguishers, etc. In

addition, attention should be paid to the use and storage of flammable substances, the status of the installations and the vigilance of museum employees. As a consequence of burning in fires other phenomena may occur, such as explosion, collapse, toxic gases, etc. In addition to other basic measures, museums are also issued an Order for taking preventive measures for fire protection during the summer period, signs are placed: "Smoking prohibited", "Access with open fire prohibited", etc., fire extinguishers (FE) are checked, etc. Mandatory training of members of the Protection and Rescue Forces in the area of fire protection should be organized in museums, education of all employees in museums and security in museums, on this issue, by professionals from the Protection and Rescue Directorate. In the case of small and initial fires in museums, the fire extinguishing action is managed by the PRH. Small fires are extinguished with FE that museums have, with hydrants (internal and external), which are mandatory for each facility and must be in working order, although, unfortunately, in many museums they are not in good condition and urgent measures should be taken to repair them. Hydrants should be placed in accessible locations for easy access and use, as they are one of the most important tools for localizing fires and preventing major disasters. Also, each museum should have a fire alarm system appropriately distributed throughout the facility. If fires are of a larger scale, additional assistance is requested from the Fire Fighting Team, and the Fire Department proceeds to evacuate visitors, employees and cultural property. The focus in localizing fires and extinguishing fires is placed on buildings and premises built of flammable materials and premises in which valuable objects or flammable materials are stored (substation, library, exhibition halls, depots, laboratories, offices, etc.).

1. Measures that should be taken before a fire occurs:

- maintenance and control of the electrical installation ;
- maintenance of fire-fighting equipment and means;
- control of the lightning rod installation;
- control of the fire alarm system.

2. Protection and rescue measures during a fire are:

- timely detection of fire;
- disconnection of the electrical network;
- timely extinguishing of the fire with fire extinguishing equipment;
- requesting assistance (by the museum director) from the Fire Brigade if the fire is of a larger scale or cannot be localized.

3. Measures for protection and rescue after a fire:

- determining the causes of the fire;
- determining the damage caused by the fire;
- cleaning the facility;
- preparing a report to the competent authorities.

Flood protection and rescue

Flood protection and rescue in the event of disasters refers to protection and rescue from damaged existing installations (water supply network, hot water network and hydrant network). In museums common cases causing small-scale floods include leaks from the roof structure, burst water pipes, small internal gutters, gutters that are not well placed to cover all the water from the roof of the building, dirty gutters, clogging of the sewage network, groundwater flow, etc. The first to react in the event of floods is the PRH. If the flood is of smaller scale, then the PRH proceeds to pump out the flooded parts with pumps, buckets, etc., and if the flood is of large scale, then the PRH proceeds to evacuate: visitors, employees and cultural property from the flooded area and assistance is requested from: the Local Department for Protection and Rescue as well as the Protection and Rescue Directorate and the Crisis Center. To avoid major disasters during floods, ongoing activities and protection measures should be implemented, as well as training of the Protection and Rescue Forces and education of employees in museum institutions.

1. Flood protection and rescue measures:

- maintenance of installations (water supply network, hot water network and hydrant network) ;
- maintenance of flood rescue equipment.

2. Protection and rescue measures during a flood:

- timely reporting of the flood;
- closing the main supply valves;
- evacuation of visitors, employees and cultural property;
- water extraction with pumps, buckets, etc.;
- providing passage across the water;
- requesting assistance (by the museum director) from: the Local Protection and Rescue Department, the Protection and Rescue Directorate, and the Crisis Center if the flood is of a larger scale.

3. Measures for protection and rescue after a flood:

- determining the causes of the flood;
- assessment of the damage caused by the flood;
- cleaning the facility;
- preparing a report to the competent institutions.

Protection and rescue from collapsing

This type of protection and rescue includes measures for protection from collapse, reconnaissance of the ruins, finding the buried, securing the structure of the damaged parts of the building, and taking measures to protect against additional hazards.

Collapses occur during stronger earthquakes, explosions, fires, etc., and in some cases even during smaller earthquakes if the structure was not built according to building standards.

In the case of collapse, the first to respond is the PRH if the rubble is small and is the result of small explosions, which have ended or are part of a localized and extinguished fire. However, if it is collapse which are caused by a strong earthquake that is the reason for declaring a state of emergency, then the forces of the Protection and Rescue Directorate and the Crisis Center are also involved.

The PRH performs discovery of the victims buried in the rubble and proceeds with their extraction; providing first aid to the injured; counting those present; if the rubble is in the area of the exhibition halls or depots, then it also proceeds with the discovery and extraction of cultural property. Then, the damage caused by the demolition is determined; the building is cleared and a report is prepared for the competent authorities.

In order to protect museum objects (especially those made of ceramics, glass and porcelain, which can break during tremors, and objects made of brass, which can be crushed when falling), during earthquakes and other tremors, they should be properly stored in museum depots. Museums around the world apply a variety of modern methods for fixing the objects in depots, which would prevent their destruction during various tremors. However, some of the museums in Macedonia are far from those standards. This does not mean that we cannot protect museum objects with the means we already have, and yet it should be a functional way of protection. Most often, such museum objects are stored outdoors on shelves, next to each other, without any protection to prevent the objects from falling. In such a case, it is necessary for the objects to be separated from each other and placed on small shelves, and for transverse boards to be placed on the front and back sides for protection. In this way, the museum objects will be fixed. Even better protection would be provided if, for each object, we had a suitable box according to the dimensions of the object, which was lined up on the inside to protect it from shocks. Placing it in boxes is also advantageous because it protects the object itself from moisture and mold, which can be found in museum storage rooms.

When we talk about protecting museum objects from natural disasters, especially in storage, we have to think about protection from multiple natural disasters at the same time. Therefore, installing earthquake protection (on shelves containing various objects) using wood would be a bad decision in the case of natural disaster, such as fire. Therefore, it would be advantageous if the rafters and the structure for attaching the rafters were metal. The boxes in which the objects will be placed should also be made of metal, and museum objects should be placed at a higher height on the shelves, i.e. not left on the floor, for protection against floods. We will have greater protection of museum objects if the depots have space to accommodate each object and if there is enough space to freely access each museum object.

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