

DELIVERABLE D.T3.1.1

Report on analysis of existing plans on
managing cultural heritage in emergencies.

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With contribution of all partners





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1. INTRODUCTION

WP T3 *Elaboration / implementation of plans for cultural heritage protection in emergency situations* focuses on preparedness measures for emergency situations and on guidelines for dealing with different types of cultural heritage damaged by water and fire during and immediately after the emergency situation.

Activity A.T3.1 *Development of strategies in emergency, with existing plans analysis and evaluation* is the first step to reach this goal. It consists of three deliverables, aimed at detailed knowledge on the status quo of heritage protection in the partner countries, an analysis of the strengths and weaknesses of the current situation, a transnational strategy for the protection of cultural heritage and recommendations for rescuers in the emergency phase for cultural heritage. D.T3.1.1 *Report on analysis of existing plans on cultural heritage in emergencies* presents the status quo of heritage protection measures in the partner countries and the results of a SWOT analysis on strengths, weaknesses, opportunities and threats performed through knowledge exchange and consultation amongst the project partners as well as associated strategic partners and state-of-the art material available online. D.T3.1.2 *Transnational strategies and implementation of existing plans in preparation to emergencies* develops feasible preparedness strategies and measures for improving the resilience of cultural heritage to flood, heavy rain and fire due to drought. The reliable and cost effective strategies that will be adopted in the seven pilot sites build on the outcomes of WPs T1 and T2. D.T3.1.3 *Recommendations for rescuers in emergency phase for cultural heritage safeguarding* provides sound information and guidelines for proper procedures and measures to be carried out in the emergency phase oriented on the risks water and fire and the cultural heritage assets in focus of the project, museums and monumental complexes.

Activity A.T3.2 *Elaboration / implementation of tools for cultural heritage protection with guidelines for an emergency team* is the second step. It consists of two deliverables and completes WP T3. D.T3.2.1 *Guidelines for Cultural Heritage Rescue Teams (CHRT)* lists the criteria for the constitution of an emergency unit / task force for cultural heritage protection as a regionally adaptable model. The model then will serve as basis for the establishment of CHRTs for pilot actions to be conducted in WP T4. D.T3.2.2 *Handbook on best transnational rescue strategies* features rescue procedures related to different types of risks and cultural heritage assets, based on transnational experience. Demands for further development of overall strategies and guiding principles will be defined.



2. SWOT ANALYSIS

The analysis at the core of this deliverable is based on information supplied by all project partners on the situation and responsibilities in their respective countries, which was gathered through a questionnaire aimed at supplying all five deliverables of WP T3 with the necessary information regarding the partner countries. Chapter A asks about existing plans on managing cultural heritage in emergencies; it focuses on the development and implementation of plans for heritage protection, training for emergency situation and regular monitoring for resilience and preparedness. Chapter B deals with the institutions and entities involved, as well as the individuals active in the cause for heritage protection. Chapter C refers to the capabilities in dealing with cultural heritage in emergency situations, for example specific knowledge and expertise, international support, regulations and materials. Chapter D inquiries about incidents with regard to cultural heritage protection, case studies and lessons identified and learned. The questionnaire aimed at measures and plans on local, regional, and national level. It asked for existing measures and plans both on the operative level and on the “boots on the ground” level, the latter referring to the personnel actually working on the heritage sites for resilience preparedness and those who actually handle the cultural heritage in cases of emergency.

Information on the pilot sites is largely based on D.T1.3.2 *Pilot sites identification* and enhanced with further information supplied by the project partners. Online research on state-of-the-art material and consultation with associated strategic partners expands the necessary information for the SWOT analysis.

A SWOT analysis is a strategic planning technique in order to specify the objectives of a project and to identify the internal and external factors that are favourable or unfavourable for achieving the objectives of a project. SWOT is the acronym for the four parameters examined throughout the process of the analysis.

- Strengths: Characteristics of the project that give it an advantage over others.
- Weaknesses: Characteristics of the projects that place it at a disadvantage relative to other projects.
- Opportunities: Elements in the environment that the project could exploit to its advantage.
- Threats: Elements in the environment that could cause trouble for the project.

Strengths and weaknesses are often internal factors, whereas opportunities and threats usually focus on the external environment.

SWOT ANALYSIS



Figure 1: The four elements of the SWOT analysis, separating external and internal origins of the parameters.¹

¹ https://en.wikipedia.org/wiki/SWOT_analysis#/media/File:SWOT_en.svg (accessed 17.04.2019).



For this analysis the aim of the project is to protect our cultural heritage from harm. As defined in ProteCHt2save, we look at movable and immovable property in museums and monumental complexes with related collections located in urban areas. The threats to the cultural heritage are defined as flood, heavy rain and fire due to drought. The following SWOT analysis on existing plans for the protection of cultural heritage in all the partner countries starts with an analysis of the environment, moves on to the status quo of heritage protection in the different partner countries, then analyses the strengths and weaknesses before concluding with opportunities and threats which already bend to the next deliverables scheduled in WP T3.

3. EXTERNAL TRENDS

External trends threatening our movable and immovable cultural heritage are either man-made or natural catastrophes, as highlighted by a recent EU publication.² But not only large scale events and calamitous situations pose a threat to our cultural environment. Everyday erosion, theft, vandalism, accidents and malfunctions, deterioration, wear and tear, micro climate, light, pests and mold threaten our cultural heritage as well. Preparatory measures for the resilience of cultural heritage include all the above mentioned smaller scale incidents as well as the big catastrophes that are the focus of ProteCHt2save - flood, heavy rain and fire. Ultimately, every preparation also facilitates the protection of cultural property during armed conflicts, as the worst man-made disaster possible. WP T1 and WP T2 have already worked towards enhancing the resilience of cultural heritage by developing measures for an improved and sustainable management of cultural heritage.

- D.T1.1.1 deals with the identification of appropriate procedures for assessing climate change impact on cultural heritage.
- D.T1.2.1 assesses the risk cultural heritage faces in extreme events in Central Europe.
- D.T1.3.1 is a manual for cultural heritage managers containing mitigation and adaptation strategies for facing future climate change pressures.
- D.T2.1.1 identifies barriers and challenges in cultural heritage vulnerabilities in different Central European countries.
- D.T2.1.2 defines a transnational concept of cultural heritage vulnerability in a changing environment.
- D.T2.1.3 is a decision support tool for stakeholders in cultural heritage protection relating the controllable critical elements to possible impacts on cultural heritage assets.
- D.T2.2.1 is a manual for good and bad practices for disasters resilience of cultural heritage risk assessment.

They all set the environmental circumstances for the SWOT analysis on cultural heritage protection measures in the partner countries.

Since WP T3 deals inter alia with the handling of the emergency phase itself, it seems appropriate to state that the first and foremost priority in every calamitous event is the rescue, and if necessary the recovery, of people. Only then can the safeguarding of cultural heritage claim centre stage. Another imminent aspect of this analysis is that all phases of the disaster management cycle are taken into account: response to a disaster, recovery, development, mitigation, and preparedness.

² Bonazza, A. et al. Safeguarding Cultural Heritage from Natural and Man-Made Disasters. A comparative analysis of risk management in the EU. European Union: 2018.

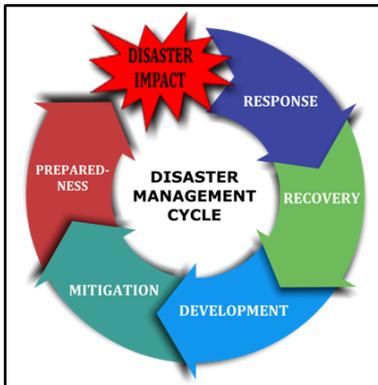


Figure 2: Disaster Management Cycle.³

4. STATUS QUO OF HERITAGE PROTECTION IN THE PARTNER COUNTRIES

As pre-step for the analysis of the strengths and weaknesses the status quo of the situation in cultural heritage protection in each partner country is analysed. The data for this analysis has been compiled by the relevant project partners and has been critically checked after compilation and analysis. For each country a short statement on the organisation of cultural heritage protection is followed by information on the political and administrative structure, which is slightly different in each partner country, but necessary to fully grasp the national organisation and cooperation of entities in cultural heritage protection. Next in line are existing plans for managing cultural heritage in emergency situations, and since special plans dedicated solely to the protection of cultural heritage in emergency situations do not exist in every partner country on every administrative level (national, regional, local), general plans for emergency management and protection are taken into account as well, in order to allow for the discussion of opportunities for future protection. Special focus is given to the pilot sites on the very local level. The pilot sites themselves have been identified and are described in detail in deliverable D.T1.3.2 which includes information on the events threatening cultural heritage on site, a site description, the main risk impacts for the site, recorded past events, and adopted measures.

The implementation of existing plans features short information on the events that occurred and tested the protection measures as well as on lessons identified and lessons learned. The last country specific part describes existing training for heritage protection and cooperation between the different entities involved, before the description of the status quo of each country is summarised, already highlighting the strengths, weaknesses, opportunities and risks of the single countries themselves.

³ http://aikya.info/aikyadevelopment/aikya/demos/demo_work/ksdma/page.php?id=141 (accessed 17.04.2019).



4.1. Austria

In Austria cultural heritage protection lies within different ministries. The Federal Monuments Protection Agency (Bundesdenkmalamt) is part of the Federal Chancellery. It is responsible for all matters of monuments protection and also defines cultural property according to the Hague Convention for the protection of cultural property in armed conflict from 1954. Responsibilities for UNESCO World Heritage in Austria rest with the Federal Chancellery and the Foreign Ministry. The Ministry of Defence is responsible for the protection of cultural property during armed conflict. On the very basic level the cultural institutions themselves are responsible for the protection of their heritage items; for preparation as well as during emergency situations they can draw on the expertise and support of the above named entities, which are supported by different NGOs active in the field of cultural heritage protection in Austria.

4.1.1. National organisation of cultural heritage protection

The Federal Republic of Austria is divided into nine federal states or provinces, of which Vienna as capital of Austria is one. The nine federal states are subdivided into districts, municipalities and communities at local level. Every federal state has its own provincial government.



Figure 3: Administrative subdivisions of Austria.⁴

On national level the responsibility for the protection of cultural heritage and UNESCO World Heritage lies basically with three ministries:

The **Austrian Federal Chancellery** has the two subordinate units Bundeskanzleramt and Bundesdenkmalamt. The **Arts and Culture Division of the Federal Chancellery of Austria** (Bundeskanzleramt) is responsible for monuments protection and preservation, UNESCO World Heritage, built and archaeological heritage, cultural landscapes, restitution of art, research on provenance, cultural objects displaced and looted during World War 2, art crimes and international transfer of cultural heritage. A subordinate entity is the Federal Monuments Protection Agency (Bundesdenkmalamt), which is responsible for restoration and catalogisation of heritage, including

⁴ https://de.wikipedia.org/wiki/Verwaltungsgliederung_%C3%96sterreichs#/media/File:Austria_States_Cities.png (accessed 17.04.2019).



archaeological sites and historical gardens, as well as the export of cultural heritage from Austria. The Bundesdenkmalamt also places built heritage under monuments protection and defines which monuments are classified as cultural property protected by the Hague Convention of 1954. The president and the executive committee are located in Vienna and each of the other eight federal states of Austria has its own local branch on provincial level.

The **Federal Ministry for Europe, Integration and Foreign Affairs** is responsible for all the UNESCO agendas. Unit V.4.a is dedicated to the United Nations Educational, Scientific and Cultural Organization (UNESCO) agendas. This unit also functions as hub to the Austrian UNESCO Commission, which is based in Vienna as well.

The **Ministry of Defence** is responsible for cultural property protection in armed conflict, based on the 1954 Hague Convention for the protection of cultural property during armed conflict, which Austria ratified in 1964. The Austrian Directive for the Military Protection of Cultural Property and the Military Safeguarding of Cultural Heritage explicitly expands the responsibilities of the military.⁵ The Austrian Army also needs to take cultural property protection into account during assistance operations for the civil government, thus not only during armed conflicts. The territorial military commands in every federal state of Austria have qualified personnel for cultural property protection, who also interact with the relevant civilian authorities and the curators of the cultural heritage institutions in order to prepare for emergency situations.

In the academic sector **Danube University Krems** plays a leading role in developing trainings and scenarios to enhance the cooperation between emergency units who might aid in the protection of cultural heritage and the curators and responsible personnel from the heritage institutions themselves. Danube University also acts as platform for transporting the knowledge of specialists from the above and below mentioned entities to everyone involved in the protection of cultural heritage, nationally and internationally.

The **emergency responder** most likely to deal with cultural heritage protection during a calamitous event is the **fire brigade**. Austria has a very well developed system of voluntary fire fighters, who operate on the very local level and who are the ones who actually know the cultural heritage in their village best, from an emergency responder point of view. The fire brigades have a very clear priority for emergency operations- human lives come first, only after all people are saved, real values, like cultural heritage, may be taken into account.

Each federal state in Austria also has a so called **Landeswarnzentrale**, a coordination unit which is responsible for the provincial coordination of an emergency. During calamitous events it is the **head of the federal state** that has to announce the official catastrophic situation, which inter alia settles the question of who is going to pay for the assistance provided. Below the provincial government it is the **head of a district** or even the **head of a municipality** who can ask for assistance operations of the armed forces and who coordinate the cooperation of all the different emergency responders involved. In Austria the civil protection is not as well developed as in other Central European countries, its functions are taken over by the different emergency responders and if necessary the Austrian Army during assistance operations to the civil government.

⁵ BMLVS. Directive for the Military Protection of Cultural Property and the Military Safeguarding of Cultural Heritage. Vienna: 2009.

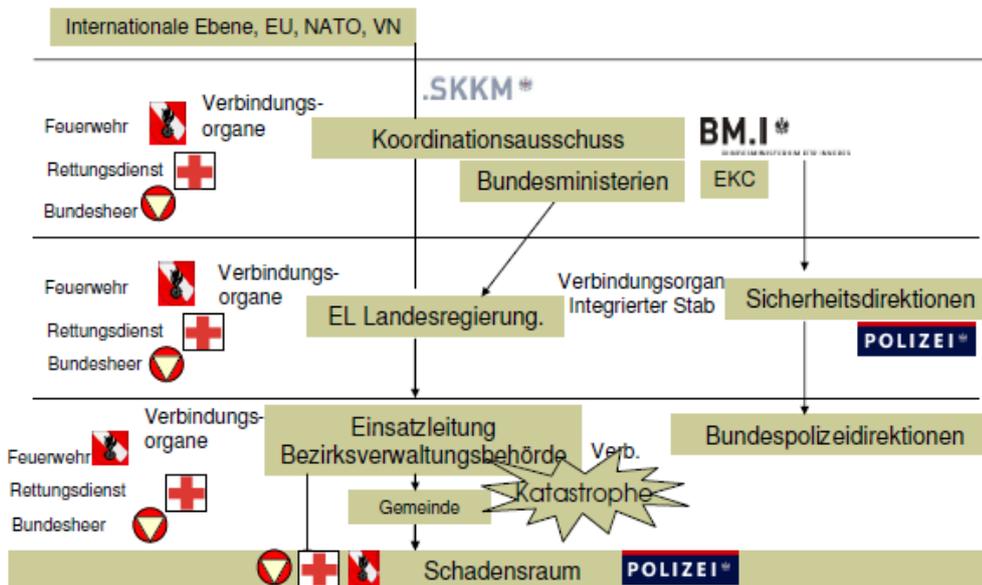


Figure 4: Levels involved in fighting catastrophes in Austria, starting with the local level at the bottom and reaching up into the international sphere if necessary.⁶

If the event affects more than one province or is no longer to be managed by the resources of one federal state, the national level takes over. The **Ministry of the Interior** steps in and coordinates the response. The national crisis and catastrophes management system (SKKM - Staatliches Krisen- und Katastrophenschutz-Management) involves emergency responders, authorities, academia, business, and the local population in order to best fight the circumstances. International assistance that might be necessary is also coordinated via the SKKM system.⁷



Figure 5: Entities involved in the Austrian SKKM system.⁸

⁶ BMI, Rechtliche und organisatorische Grundlagen des Staatlichen Krisen- und Katastrophenschutz-Managements (SKKM). Wien: 2010, 90.

⁷ BMI, Rechtliche und organisatorische Grundlagen des Staatlichen Krisen- und Katastrophenschutz-Managements (SKKM). Wien: 2010.

⁸ Based on the figure from the Ministry of Interior, Siegfried Jachs: <https://www.bmi.gv.at/204/skkm/start.aspx> (accessed on 17.04.2019).



Crisis and emergency response units regularly **train together on local and regional level**. **National exercises** are more scarce, but equally important. The protection of cultural heritage assets does not play a role in these exercises until now, but the tendency goes in the direction of including cultural heritage protection into the exercises and also the coordination efforts on the level of the Ministry of Interior.

Since 2013 the Ministries for Finance, Interior and the NGO Blue Shield Austria cooperate in the fight against **illicit trafficking of cultural heritage**, but the cooperation has not been developed into other spheres of the protection of cultural heritage.⁹ Based on the UNESCO Code of Ethics for Dealers in Cultural Property an Austrian version was developed.¹⁰ Since 2016 the Austrian Kulturgüterrückgabegesetz (law for restitution of cultural heritage) is effective.¹¹

The **Austrian UNESCO Commission** is based in Vienna and functions as link to the UNESCO in Paris. ICOM's National Committee of Austria provides a huge platform and immense knowledge on museums and the expertise of the **International Council of Museums**. The same goes for the **Austrian National Committee of the Blue Shield** and the **Austrian Society for the Protection of Cultural Property**, both based in Vienna as well.

On a more local level the **Museumsmanagement of Lower Austria** provides training and expertise for curators and museum personnel on provincial level and **private initiatives** like the **Denkmalwerkstatt** work together with private owners of large collection, archives, and heritage items in general and also built heritage.

The protection of cultural heritage from and during calamitous events is only a small part of the tasks of the above mentioned entities and authorities. In the end the **owners and curators of cultural heritage** items or institutions are **responsible for the emergency planning** for their objects. Emergency plans for visitors and personnel are mandatory by law; there is however no liability to prepare emergency evacuation plans for cultural heritage, be it movable or immovable. Owners and curators can request support by the above mentioned entities with knowledge in cultural heritage protection, and the different NGOs working the broad field of cultural heritage protection in Austria are also very supportive.

4.1.2. Existing plans for managing cultural heritage in emergency situations

As a consequence there is no general plan for the protection of cultural heritage in Austria, not even on regional or local level. The owners themselves are responsible and there is no liability to inform the authorities on existing plans. No national guideline for the development and implementation of such plans exists. One of the aims of the Danube University is to raise awareness for the necessity of cultural heritage protection both from man-made and natural disasters and to contribute to the development of guidelines for emergency preparedness plans for movable and immovable heritage. For the ten UNESCO World Heritage sites in Austria management plans do exist, which alas do not necessarily take issues of cultural heritage protection into account.

⁹ A. Gach, Gegen illegalen Kulturhandel. Öffentliche Sicherheit. Das Magazin des Innenministeriums 5-6/17, 9-10.

¹⁰ UNESCO, International Code of Ethics for Dealers in Cultural Property, adopted 1999, <https://unesdoc.unesco.org/ark:/48223/pf0000121320> (accessed 17.04.2019); WKO Österreich, Ethikkodex für den Kunst- und Antiquitätenhandel. Verhaltensregeln für Händler in Österreich, 2018, <https://www.wko.at/branchen/handel/juwelen-uhren-kunst-antiquitaeten-briefmarken/ethikkodex-fuer-den-kunst--und-antiquitaetenhandel.html> (accessed 17.04.2019).

¹¹ BGBl I 19/2016.



National, regional and local emergency plans aim at fighting different natural catastrophes. Concerning the threats water and fire, which are at the core of ProteCHt2save, **national plans** include the Flood Action Programme¹² and the Hochwasserrisikomanagementplan,¹³ which also aim at reducing the threats of floods. A **regional plan** encompassing Lower Austria is the 1st DRB Flood Risk Management Plan which aims at the Danube river basin in general.¹⁴ **Local plans** feature dams and mobile flood protections, like the one in the Wachau region, as described in deliverable D.T1.3.2 *Pilot Site Identification*. In Austria the voluntary fire brigades also fight floods and its consequences together with the local population. They also have firefighting plans and information on the most hazardous and vulnerable items in their area of responsibility concerning their eponymous threat, fire. In Krems-Stein, which has two medieval city centres with houses and roofs interconnected, the local fire brigades have developed a plan for what they call “Case Zulu”, fire in the old towns of Krems and Stein. In August 2017 a big fire happened in the outskirts of Krems and the lessons learned are currently adopted into the modified firefighting plan.

Thus the **fire brigades** are the ones on spot who already work for the protection of our cultural heritage and who can expand their possibilities for protecting cultural heritage together with the civilian owners of movable and immovable heritage, if training and education is made possible. Qualified personnel, material and equipment can be supplied by the **Notfallverbund Österreichischer Museen und Bibliotheken**, an initiative started by the Kunsthistorisches Museum Wien (the National Art Museum in Vienna). This Notfallverbund consists of different museums, archives and libraries all over Austria and pledges non-bureaucratic assistance to members in need.

4.1.3. Implementation of existing plans

A series of floods in Krems and Stein have shown that the measures adopted so far are very efficient for fighting the floods of the river Danube and its tributaries. Following the big floods of 2002 and 2009 the mobile flood barrier was constructed in 2011. The floods of 2011 and 2013 were successfully prevented from reaching Stein, but the height of the flood in 2013 had almost been too much for the mobile flood protection; sandbags had to be put on top of the barriers in order to keep the water out.

As general conclusion it must be stated that cultural heritage protection is so far not included in the outlines of any official emergency preparation plans. Existing plans, especially those dealing with floods and fire, do help protect cultural heritage, but it is not their explicit aim, nor is the topic explicitly included.

4.1.4. Education and training

Two entities offer education and training for cultural heritage protection in Austria. One is the **Austrian Army** who trains its specialised personnel for the protection of cultural property during armed conflict. These personnel then have the knowledge and possibility of raising the awareness of public and private owners for the necessity of preparations. The second one is **Danube University Krems** with its **Centre for Cultural Property Protection** that offers a full Master’s Programme on cultural property protection with one of the outputs being the preparation of heritage facilities for calamitous events, and several shorter programmes, international summer universities and live exercises together with emergency first responders like the fire brigades and the Austrian Armed Forces.

¹² https://www.icpdr.org/flowpaper/viewer/default/files/ICPDR_Flood%20_Action_Programme.pdf

¹³ <https://www.bmlfuw.gv.at/wasser/wisa/fachinformation/hochwasserrisiko/hochwasserrisikoplan.html>

¹⁴ <https://www.icpdr.org/main/sites/default/files/nodes/documents/1stdfrmp-final.pdf>



4.1.5. Summary Austria

Plans for the protection of movable and immovable heritage are not mandatory in Austria. Emergency plans for protecting people, communities, and real values in general also take care of cultural heritage, though cultural heritage is not mentioned and targeted explicitly by these plans. The protection of cultural heritage in most cases appears to be a side effect of the general emergency plans. Responsibilities for cultural heritage protection are split between different entities; a common platform is missing hitherto. In the end the owners and curators of cultural heritage and cultural heritage institutions are responsible for developing emergency plans for their cultural heritage assets, but these plans are not mandatory. There are no official guidelines for their development or the collaboration with emergency responders like the fire brigades.

The biggest opportunities are to raise the public awareness for the necessity of cultural heritage protection and preparedness measures, to assist cultural heritage curators and owners in developing site specific plans i.e. with guidelines and handbooks, and to include cultural heritage protection into the training of the fire brigades.



4.2. Croatia

Cultural heritage and the impact of risk and disaster on cultural heritage management are not adequately represented in legal regulations and strategic documents of the Republic of Croatia. The area of protection and restoration of tangible and intangible cultural heritage in Croatia is regulated by certain legal and subordinate regulations. However, there are no clear provisions regarding the basic conditions and preventive disaster protection measures, or the issuing of permits or licenses for making a risk assessment of the exposure of cultural heritage to disasters. Therefore, such activities in this area are mainly carried out according to the rules of the profession. Specifically, individual organizations, depending on the specific cultural content of their facilities, assess the risks and take preventive measures, protection measures, and define procedures for rescuing cultural heritage in the event of a disaster. Institutions performing cultural conservation activities are obliged to provide conditions for the protection of cultural objects in the event of exceptional circumstances as a result of a particular catastrophe such as flood, fire, earthquake or other exceptional circumstances.

4.2.1. National organisation of cultural heritage protection

Croatia is subdivided into 20 counties and the capital region of Zagreb. Zagreb has the legal status of county and capital city at the same time. The counties are subdivided into 127 cities and 429 municipalities altogether.



Figure 6: Administrative subdivisions of Croatia.¹⁵

¹⁵ https://en.wikipedia.org/wiki/File:Counties_of_Croatia.svg (accessed 17.04.2019).



National legislation regulating the protection of cultural heritage is the Law on Protection and Conservation of Cultural Property (NN, 69/99, 151/03, 157/03, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 44/17, 90/18), Law on Protection and Rescue (NN, 174/04) and the Law on the Civil Protection System (NN, 82/15, 118/18). At the national level has been analysed the Strategy on Protection, Conservation and Sustainable Economic Use of Cultural Heritage of the Republic of Croatia for the period 2011-2015 (2011), the Strategic Plan of the Ministry of Culture 2019-2021 (2018) and Risk Management Strategy (2018).

4.2.2. Existing plans for managing cultural heritage in emergency situations

Croatia has implemented a number of national and local strategies and plans for **flood management and the protection of the population as well as material and cultural goods and the environment**.

National plans comprise the water areas management plan,¹⁶ the water management strategy,¹⁷ and the management plan of water areas,¹⁸ which all analyse the watercourse and the coast areas of Croatia. The disaster risk assessment for Croatia takes flood, heavy rain, fire, earthquakes, droughts, and technical disasters into consideration; it analyses the spatial situation in Croatia combined with major threats, possible disasters and their damage estimate.¹⁹

The **local level** focuses strongly on the city of Kaštela as pilot site in ProteCHt2save. Kaštela contains seven settlements: Kaštel Sućurac, Kaštel Gomilica, Kaštel Kambelovac, Kaštel Lukšić, Kaštel Stari, Kaštel Novi and Kaštel Štafilić. In the center of old town, in all seven settlements, with the historical heritage, most of the buildings are from period before 1920s', and therefore, the most damage will occur in those areas during the bad weather. On the local level Kaštela City has a valid **assessment of the vulnerability of the population, material and cultural goods as well as the environment**. The assessment is conducted by the **State Protection and Rescue Directorate**, which is responsible on national level. The document analyses the spatial situation on the local level, Kaštela's major threats, possible disasters and their damage estimate. As the national disaster risk assessment for the whole country it takes as well flood, heavy rain, fire, earthquakes, droughts and technical disasters into account.²⁰

At the regional level, in this case in the **Split-Dalmatia County**, there is no elaborated cultural heritage management plan in general as well as the cultural heritage management plan in emergencies. Therefore, relevant documents dealing with the topic of cultural heritage in the context of its protection and management are Development Strategy of the Split-Dalmatia County 2011-2013, Development strategy for the Urban Agglomeration Split, Master plan of the Split-Dalmatia County Tourism Development (2017-2027) with the Strategic and Operational Marketing Plan (2018) and the Plan of the Cultural Tourism Development of the Split-Dalmatia County.

There are no plans for cultural heritage management in emergencies in the city of Kaštela or the importance of making one. The concept of cultural heritage management in the City is still unknown and this issue is not sufficiently analysed. Although the vulnerability assessment document recognizes

¹⁶ <http://www.voda.hr/sites/default/files/dokumenti/dodatak2.pdf>

¹⁷ http://www.voda.hr/sites/default/files/dokumenti/strategija_upravljanja_vodama.pdf

¹⁸ http://www.voda.hr/sites/default/files/plan_upravljanja_vodnim_podrucjima_2016_-_2021_0.pdf

¹⁹ <http://stari.duzs.hr/download.aspx?f=dokumenti/Cianci/ProcjenarizikaodkatastrofauRH..pdf>

²⁰ <http://www.kastela.hr/wp-content/uploads/2015/04/procjena-ugro%C5%BEenosti-stanovni%C5%A1tva-materijalnih-i-kulturnih-dobara-i-okoli%C5%A1a.pdf>



the impact of certain catastrophes on cultural heritage, it is not considered as strategically important in the development document for the city of Kaštela. Relevant documents are the City of Kaštela Development Strategy 2016-2020. (2016), Strategy for Cultural Development of the City of Kaštela 2017-2023. (2017), Assessment of the vulnerability of population, material and cultural goods and the environment of the city of Kaštela (2015) and the General Urban Plan for the City of Kaštela (Official Gazette of the City of Kaštela 2/06, 2/09, 2/12).

4.2.3. Implementation of existing plans

Kaštela City itself and the settlements in Kaštela Bay in general are threatened by water and fire. The coast and marine environment of the Adriatic was for many decades completely exposed to various harmful pressures, caused by excessive urbanisation, coastal construction, pollution, tourism and the load of natural resources, thereof primarily water and an extensive lack of coordination between the different sectors involved: local, regional, and national bodies and institutions. In general floods regularly occur after heavy rainfall, like the flood on October 12 2012 which featured a downpour of more than 137 litres per square metre and flooded the whole city of Kaštela. According to the emergency plan for Kaštela, the "Assessment of population vulnerability, material and cultural goods and the environment of the City of Kaštela" the city has no permanent natural watercourses, the 47 major and smaller floodplain watercourses that are registered run high with water only after abundant precipitation.²¹

Strong southern winds and low meteorological pressure can result in the city being flooded from the sea side. Strong tidal waves can reach up to 7 metres of height. In combination with the influence of air and wind pressure they raise the sea level and flood the ancient parts of Kaštela.²²

4.2.4. Education and training

The importance of including cultural heritage injects into education and training of all stakeholders and relevant first responders is realised and will be adapted in the course of ProteCHt2save.

4.2.5. Summary Croatia

Cultural heritage and its vulnerability to the effects of certain disasters and the need for emergency management are not adequately represented in strategic and other documents at local, regional and national level. In the documents at the national level, cultural heritage is observed in the context of uniqueness. The importance of its continuous protection and renewal is recognized as well as the influence of certain natural phenomena on the inheritance of heritage, in particular architectural heritage. However, in the documents at the regional and local level, cultural heritage is mainly regarded as a resource for the development of cultural tourism and as a unique wealth of each area, but the importance of its protection and preservation is not particularly emphasized. The impact of natural disasters such as flood or fire on elements of cultural heritage is not reflected in most of the strategic documents at local and regional level, although this impact has the greatest consequences at the local level. Therefore, the need to manage such crisis situations in these documents is not recognized either. According to the analysis, it can be concluded that in the documents at the national

²¹ Volunteer Fire Department "Mladost", K. Sućurac, Gajdek Đ., 2014.

²² Iuljan, M., Zore - Armanda, M., 1976. Oceanographic Properties of the Adriatic Sea, Oceanography and Biological Biology - Annual Review, 14th.



level, mainly all issues related to cultural heritage are identified and certain solutions are offered through defined goals, priorities and measures. According to the regional and local level, the detail of the issues is diminished, and strategic development and sectoral documents mention only the most fundamental issues related to cultural heritage in general.

By analysing national, regional and local level documents it is stated that there are **currently no cultural heritage management plans in emergency situations**. Mentioned emergency situation implies the occurrence and impact of natural disasters such as flood, fire, earthquake and the like. Although there are no concrete management plans at the national level, some legal regulations and strategic documents regulate certain segments of the cultural heritage management process, mainly related to the protection of cultural goods. However, the protection of cultural goods is only one of the activities in the field of cultural heritage management, so strategic and other documents should not only focus on one management segment. Such approach is evidence that the **process of managing the cultural heritage is not integrated and systematic but views only individual segments**. This, of course, is not effective in the long term period and leads to inefficient development of the cultural heritage management system from the national to the local level.

In all analysed strategic and sectoral documents, cultural heritage is represented in only a small segment, and the management of cultural heritage is only discussed in the context of the future development. Since there are currently no cultural heritage management plans in emergency situations, and in the area of the analysed city of Kaštela there are no general plans for cultural heritage management, this problem is recognized and highlighted in the strategic documents as one of the goals for future development. The need for introducing systematic cultural heritage management is recognized. For certain areas where the daily impact of natural disasters and climate change on cultural heritage is recognized, it is necessary to develop cultural heritage management plans in emergencies. One of those areas in which the elements of architectural heritage are threatened by natural hazards on a daily basis is the city of Kaštela.

4.3. Czech Republic

The Czech Republic mainly battles flood emergencies in different river basins and has sound emergency measures in place and adapts them to ever higher standards, also made necessary by the increasing appearance of high-level floods.

4.3.1. National organisation of cultural heritage protection

The Czech Republic is divided into 13 regions and Prague, the capital city. Every region has an elected assembly and a regional governor. The regions are subdivided into districts, see figure xx below.



Figure 7: Administrative subdivisions of the Czech Republic.²³

4.3.2. Existing plans for managing cultural heritage in emergency situations

Concerning flood and flood protection the Czech Republic has a number of national and one international flood risk management plan. **National plans** comprise the “Concept of dealing with flood protection in the Czech Republic with use of technical and environmentally-friendly measures” from 2010 which aims at the assessment and management of flood risks according to the sustainable development of society and natural environment protection interests in accordance with Directives 2007/60/EC and 2000/60/EC. The measures are based on the evaluation of the current valid legislative documents and the state of implementation of current programs, the objectives and measures set out in the water planning process for the period 2010 to 2015 and the needs for financial resources after 2013.²⁴ The “Flood Emergency Plan CR” is a digital flood emergency plan of Prague and all its city districts, currently

²³https://upload.wikimedia.org/wikipedia/commons/2/23/Czech_Rep._-_Bohemia%2C_Moravia_and_Silesia_III_%28en%29.png (accessed 17.04.2019).

²⁴ Koncepce řešení problematiky ochrany před povodněmi v ČR s využitím technických a přírodních opatření: <http://eagri.cz/public/web/mze/ministerstvo-zemedelstvi/koncepce-a-strategie/koncepce-reseni-problematiky-ochrany.html>



being processed.²⁵ Since the Czech Republic has been struck repeatedly by severe floods in the last two decades, a series of national “Flood Risk Management Plans” aims at limiting the impact of floods. A project series “Flood Prevention Programme I-III) has developed and implemented different measures.²⁶

The Czech Republic participates also in the “International Flood Risk Management Plan” which is being developed by all the countries located in the Elbe River Basin District. The plan consists of a jointly prepared part A with summary information for the **international level** and the **national parts B**, prepared by the individual states. The plan is coordinated by the International Commission for the Protection of the Elbe River (ICPER).²⁷

4.3.3. Implementation of existing plans

From the multiple floods in the Czech Republic affecting Prague two are linked with specific measures adopted after the receding of the water, therefore after the catastrophe itself, as preparation for the next occurrence. After the flood in 2002 which affected even regions beyond Central Europe a system of barriers was constructed - earth barriers, concrete barriers and removable flood barriers. The affected buildings were also inspected for their safety. During the flood in June 2009 the barrier system already reduced the damages in Prague itself, though substantial parts of the city are still unprotected by river barriers. The flood in June 2013 came in three waves and affected the whole Elbe River Basin District. Prague itself was affected and in the aftermath of the flood buildings were inspected for safety.

4.3.4. Education and training

The importance of including cultural heritage injects into education and training of all stakeholders and relevant first responders is realised and will be adapted in the course of ProteCHt2save.

4.3.5. Summary Czech Republic

The Czech Republic has a sound system of especially flood protection in place. Academia and research centres work together with the local fire fighters, politicians and stakeholders in order to further develop the measures for the protection of the movable and immovable cultural heritage.

²⁵Povodňový plán ČR:

http://webmap.dppcr.cz/dpp_cr/isapi.dll?GEN=LST&map=info_pp&TS=pp_kraj&CF_SQY=A%5BKRAJ%5D&TMPL=krajPP_1

²⁶ Plány pro zvládnání povodňových rizik: http://www.povis.cz/pdf/PZPR_labe.pdf

http://www.povis.cz/pdf/PZPR_odra.pdf

http://www.povis.cz/pdf/PZPR_dunaj.pdf

²⁷ <http://www.ikse-mkol.org/en/eu-directives/flood-risk-management-directive/international-flood-risk-management-plan/>

4.4. Hungary

Following a bottom-up principle Hungary is well prepared for calamitous events. Every single settlement has to undertake a risk analysis and following that analysis is filed into the Hungarian disaster management classes. The local emergency plans are drawn together on regional level and the national emergency plan is built on the different regional plans. Cultural heritage is hitherto not explicitly included in these plans. The cultural heritage institutions themselves are responsible for preparing plans for cultural heritage protection, though there is no obligation to do so and no national standard. However, in 2018 the historic preservation authorities requested museums to prepare plans for preventive conservation including cultural heritage protection measures for emergencies. These preparations are still ongoing and will build on ProteCHt2save's outputs.

4.4.1. National organisation of cultural heritage protection

Hungary is subdivided into 19 counties. The capital Budapest itself is an independent entity. The counties themselves are again divided into 174 districts in total. The districts themselves are further subdivided into towns and villages.

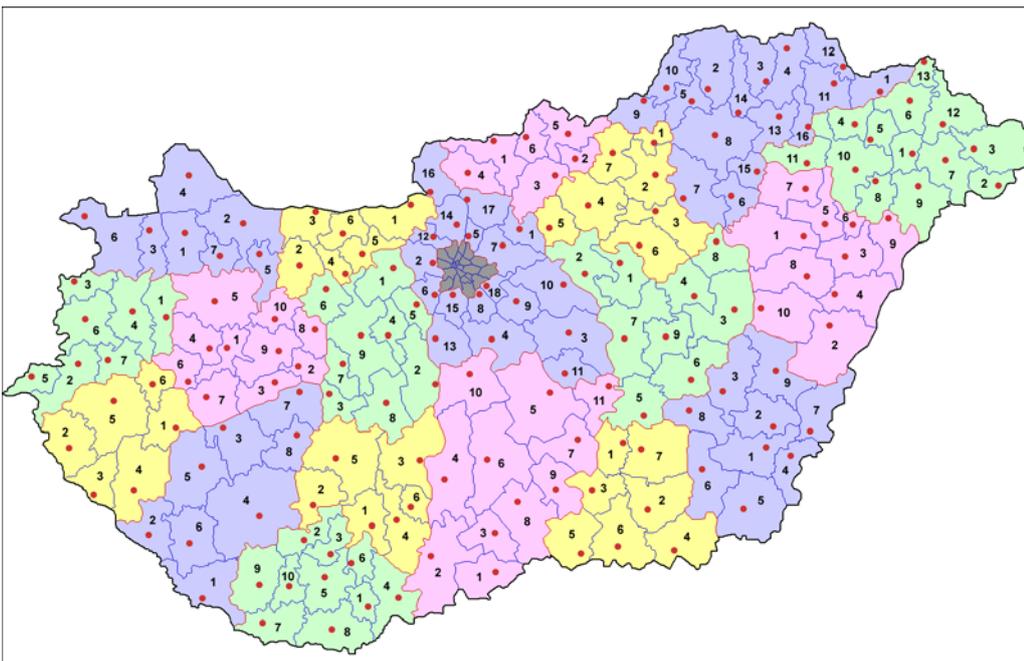


Figure 8: Administrative subdivisions of Hungary.²⁸

The **Hungarian legal system** as basis for the management and protection of cultural heritage assets clearly states that the **rescue of people is the primary aim** in emergency prevention and in dealing with emergency situations themselves.²⁹ The next priority is the recovery of values, which include cultural property, the protection of critical infrastructure and the maintenance of the operability of the economy. **Risk analyses are prepared for each settlement.** The single plans tackle the catastrophes and events most likely to occur. Natural and civilizational dangers are taken into account. Each settlement is then ranked according to the Hungarian disaster management classes,

²⁸ [https://en.wikipedia.org/wiki/Hungary#/media/File:Townships_\(districts\)_of_Hungary.png](https://en.wikipedia.org/wiki/Hungary#/media/File:Townships_(districts)_of_Hungary.png) (accessed 17.04.2019).

²⁹ Hungarian Legislation 234/2011 (XI.10) Government Decree, § 21-24.

which range from category III to I. Category III includes settlements that are less at risk based on a summarised risk assessment. Disaster protection class I includes the most endangered settlements.³⁰ These national plans for the settlements on regional level take all kinds of calamitous events into account: inland water, local water damage, lightning floods, extraordinary weather events, earthquakes, landslides, collapses of buildings, and subsidence. Emergency plans are prepared by the municipal mayor with the help of a professional disaster management body. Figure XX shows the risk map of Baranya County following the mentioned categories.

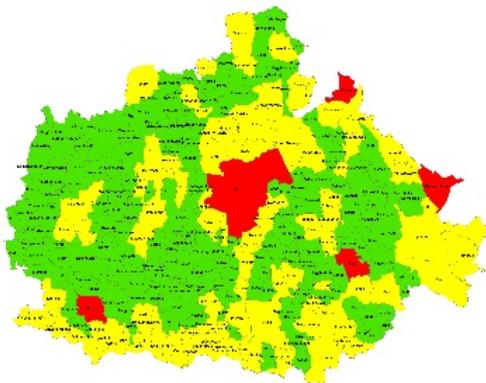


Fig. 9: Risk Map of Baranya County.³¹

4.4.2. Existing plans for managing cultural heritage in emergency situations

The basis of planning for every calamity is the above mentioned **risk analysis and planning for each settlement**, which classifies the single settlements accordingly into three disaster management categories. In a **bottom-up principle**, basic emergency management plans have to be prepared for each settlement. Each county then prepares a **regional emergency management plan**, based on the plans of the settlements, and finally the **national plan** draws on the findings on regional county level. The settlement plans have to include plans for the prevention of flooding. Floods are recognised as the largest threat. In addition to flood prevention the plans have to contain information on SEVESO plants in the settlements.

In addition to these plans the settlements have to develop **firefighting and technical rescue plans** for individual sites on their territory (community areas, different institutions). These detailed plans are prepared by the professional fire fighters in the operational units.

As of today the cultural heritage institutions like museums, archives, and sites, are not obliged to prepare emergency plans for the cultural heritage they manage. The existing plans are mainly fire alarm (evacuation) plans, as well as measures for alarming the managers of the buildings, powering down and closing the building. Data sheets on the cultural heritage give quick information to the intervening firefighters to choose the right tactic.

During World Wars I and II the museums and galleries had to prepare plans for the removal of works of art for safekeeping, but these plans are outdated and no longer rise to the challenges of the 21st century. At the moment no national standard exists for cultural heritage protection plans, and there is

³⁰ <http://baranya.katasztrofavedelem.hu/baranya-megye-veszelyeztetettsege>

³¹ Disaster Management Department of Baranya County.



no obligation for such plans either. The **cultural institutions are themselves responsible** for preparing such plans. Usually measures for improving the protection of cultural heritage sites concur with the modernisation of the exhibition areas, and the rearrangement of displays. For implementing plans for the protection of cultural heritage on site the relevant authorities have to supervise and agree on the measures developed. In Hungary the District Office Authority Department - Department of Construction and Heritage Protection regulates all activities concerning the management, storing, and presentation of archaeological sites, buildings listed as protected, memorial sites and cultural values, be they objects, works of art, or collections. The system which was introduced in 2015 (with new legislation in 2017)³² obliges museums in county seats to appoint one person from their staff to be in charge of conservation on county level. The personnel appointed needs to have at least intermediate or higher qualification in management or restoration and has to undergo a **two-times seven-days training programme**.

Depending on the type of event, the **response to the threat for cultural heritage** looks different every time, but it is the entity managing the cultural site that begins with responding to the situation. Usually the fire fighters are the first ones to be called in. If a fire breaks out and the automatic fire warning system is in place, the fire fighters are first on scene anyways. If necessary, the voluntary fire fighters are called in for assistance, as are experts on different topics and service providers of technical capabilities, e.g. cranes. Security on the site, if needed, is managed by the police or civilian patrols. The fire fighters themselves are not necessarily trained in the protection and recovery of cultural heritage as real values, since the training material in Hungary is not standardised and cultural heritage issues are an option only, but not mandatory. Thus the topic's representation depends heavily on the individual judgement of the commanders of the single units.

The recovery of cultural heritage items is seen in close relation to restoration work after a calamitous event. Insurances only take over partially, most of the necessary work needs to be done or financed by the institutions themselves.

The **management and coordination** of the different **plans for disaster preparedness and resilience**, which can include cultural heritage protection, depends on the scale and effect of the emergency situation. Low level damages are coordinated by the control centre of the **county disaster management directorates**. **On site the ongoing operation** is controlled by the commander on site affected, who usually is the commander of the fire brigade in action. In the case of more complex and prolonged events, the **county-level local emergency management authority** (LEMA-county level) is formed. It consists of experts of the different authorities involved in the protection measures. If the event is on disaster level, the Hungarian government proclaims an emergency and the **National Emergency Centre** comes together. It consists of the heads of involved national authorities; ministries coordinate at national level and maintain the operation of the country control centres.

The different entities and organisations involved know each other and their capabilities from routine cooperation. In addition to cooperating in real events there are **joint trainings**, which do not feature cultural heritage protection, unless the training fire brigades have chosen cultural heritage protection as one of their special expertise fields.

4.4.3. Implementation of existing plans

In 2018 the **historic preservation authorities** ordered museums to prepare **plans for preventive conservation** and the **recovery of the works of art**, if necessary in a calamitous event. These preparations are ongoing and will hugely draw on the findings of ProteCHt2save. The fire fighters seem

³² 32/2017 (XII.12.) EMMI decree.



as most likely first responders also for cultural heritage, thus aiding the personnel of the cultural institution itself. Special plans for the protection of cultural heritage developed by the different cultural institutions would of course have to be arranged with the relevant fire brigades.

General management plans for cultural sites do exist and in accordance with the overall statutes of the Hungarian legislation the authorities can inspect the entities managing deposit sites and monuments every five years. The main aspect of the **inspection** is the request for increased protection of cultural assets against threat, damage and forgery. No nation-wide standardised assessment system is in place. If grievances are detected, measures of conservation and maintenance can be ordered. If the warnings are not heeded and the necessary measures not adopted, the authorities are to take steps towards imposing a heritage protection fine. In the case of museum, the above mentioned person appointed to the single county is obliged to inspect the museum institutions possessing permission and the person must report on this annual inspection.

4.4.4. Education and training

No specific training for the protection of cultural heritage exists, but the persons that museums in county seats have to appoint for being in charge of conservation on the county level need to undergo a two-times seven-days training programme.

The fire brigades also can opt for including cultural heritage protection knowledge into their training modules, but this is a voluntary decision and not mandatory.

4.4.5. Summary Hungary

Following a bottom-up principle Hungary is well prepared for calamitous events. Every single settlement has to undertake a risk analysis and following that analysis is filed into the Hungarian disaster management classes. The local emergency plans are drawn together on regional level and the national emergency plan is built on the different regional plans. Cultural heritage is hitherto not explicitly included in these plans. The cultural heritage institutions themselves are responsible for preparing plans for cultural heritage protection, though there is no obligation to do so and no national standard.

Preventive conservation on the other hand is regulated on county level by a system introduced in 2015. The personnel responsible for preventive conservation on county level has to participate in special training programmes, which do not include heritage protection and preparation for calamitous events, but pose a big opportunity for including these topics and spreading the knowledge on regional and local level. The same goes for the fire brigades, who have the opportunity of developing into emergency first responders for cultural heritage protection by including the topic mandatorily into their training and by closely cooperating with the local cultural heritage institutions and owners. General management plans for cultural heritage sites do exist, but unfortunately, unified emergency preparedness measures have not yet been developed.

The biggest opportunity however seems to be the 2018 request of the historic preservation authorities that museums prepare plans for preventive conservation including cultural heritage protection measures for emergencies. The preparations are still ongoing and will build on ProteCHt2save's outputs.



4.5. Italy

Italy has a very coordinated system concerning the protection of cultural heritage during emergency situations and the preparation of measures beforehand. The Italian Ministry for Culture and Tourism coordinates the safeguarding of cultural heritage during a national emergency. The crisis units established in 2012 work in close cooperation with the law enforcement (Nucleo Carabinieri) for Protection of Cultural Heritage, the National Agency for ecclesiastical heritage, the fire brigades and civil protection. On subordinate levels similar units are installed on regional as well as local levels. On the regional and local levels the presidents of the regions and the mayors are the civil protection authorities coordinating all efforts for fighting a disastrous situation.

4.5.1. National organisation of cultural heritage protection

Italy is subdivided into 20 regions, of which five have a special autonomous status. The country has further 14 metropolitan cities and 96 provinces, which in turn are subdivided into 7915 municipalities.³³



Figure 10: Administrative subdivisions of Italy.³⁴

In Italy the protection of cultural heritage in emergency situations is coordinated on the national level. On May 29 2012 directive n. 24 established the **Crisis Unit - National Coordination UCCN - MiBAC**, which is depicted below. The MiBACT, the Italian Ministry for Culture and Tourism thus is

³³ <https://www.tuttitalia.it/variazioni-amministrative/> (accessed 22.04.2019).

³⁴ <https://en.wikipedia.org/wiki/Italy#/map/0> (accessed 17.04.2019).



responsible for the national coordination of cultural heritage emergency. On national level it cooperates with the Nucleo Carabinieri Tutela Patrimonio Culturale (NCPTC, the law enforcement for the Protection of Cultural Heritage), the Ufficio nazionale beni culturali ecclesiastici (CEI, the National Agency for ecclesiastical heritage), the Fire Brigades and Civil Protection as well as the general direction of the MiBACT and other central, national or autonomous institutions. Below that national level are three regions with their own Territorial Crisis Units, which work together with the Nucleo Carabinieri TPC, the local Bishop's Conference, the local representatives of the MiBACT, the local fire brigades, the local civil protection and other local institutions relevant for coping with the situation from the cultural heritage point of view. The Regional Directorates as national peripheral structures are competent to activate these Territorial Crisis Units, interacting with the listed institutions. The local crisis unit itself has three branches with different specialisations.

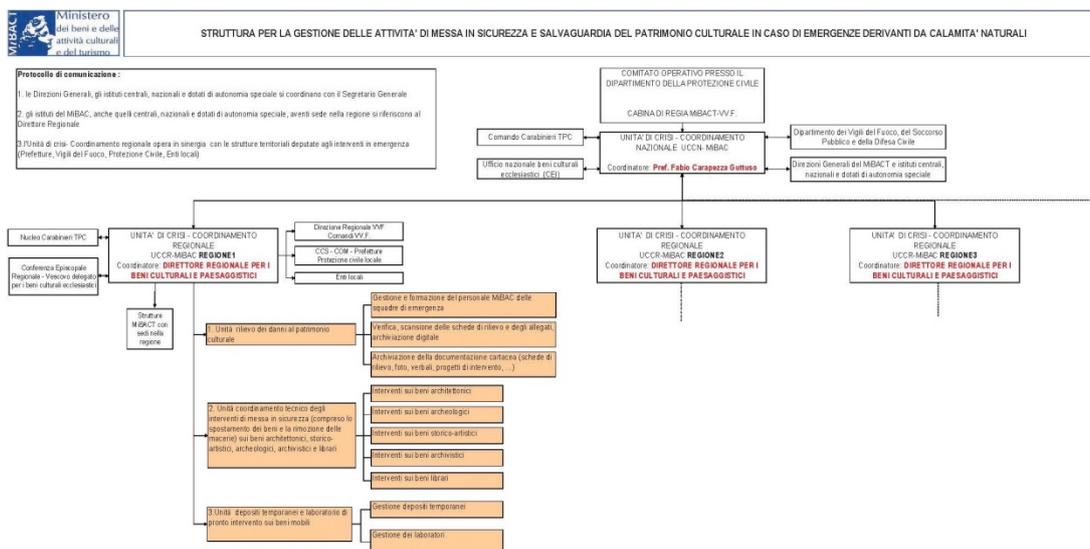


Figure 11: Structure of the 2012 established MiBAC crisis units.³⁵

Details on responsibilities in the different phases of emergency and its prevention are listed in the **Bray Directive (2013)** and repeated in the subsequent **Franceschini Directive (2015)**. Both describe as well the operational collaboration between the Civil Protection, the MiBACT and the representatives of local authorities involved. The national centre collecting and sorting all the relevant information is the Crisis Unit - National Coordination UCCN-MiBAC, which interacts with the National Civil Protection on national level. Concerning recovery measures the **Superior Institute for Conservation and Restoration of the Ministry for Cultural Heritage and Activities** is the one to be named; it recovers, restores and protects artworks from places affected by disasters. Actions to be taken on the local level are decided by the **Regional Secretary coordinator of the UCCR-MiBAC Crisis Unit**, which on its level also interacts with the Civil Protection structures, the prefectures, the Nucleo Carabinieri TPC and with the Fire Brigades.

³⁵ Attachment 3 - Schema della struttura per la gestione delle attività di messa in sicurezza e salvaguardia del patrimonio culturale in caso di emergenze derivanti da calamità naturali. Attached to Directive 2013, Dicembre 12: Procedure per la gestione delle attività di messa in sicurezza e salvaguardia del patrimonio culturale in caso di emergenze derivanti da calamità naturali. (published in GU Serie Generale n. 75 del 31-3-2014). <http://www.beniculturali.it/mibac/export/MiBAC/sito-MiBAC/MenuPrincipale/Normativa/Direttive/index.html> (accessed 22.04.2019).



4.5.2. Existing plans for managing cultural heritage in emergency situations

Concerning the national level and following the analysis of the environmental assessment drawn together above, the Italian initiatives aim at tackling climate anomalies resulting in extreme weather events, such as heat waves, heavy rain, flood, earthquakes and fires. In addition some areas have developed emergency plans for volcanic eruptions. Between the 1990s and the beginnings of the 2000s management plans for cultural heritage mainly focused on fire, whereas recent major plans for the management of cultural heritage in emergency situations focus mainly on seismic risks.

The following recent major plans for the management of cultural heritage in emergency during natural calamities are in place and concern either the emergency protection of cultural heritage during extreme events in general or focus on earthquakes.

Date	Reference	Titel	Content
2004, October	Circolare n. 132	Piani di emergenza per la tutela del patrimonio culturale	Emergency plans for the protection of Cultural Heritage
2005, March 7 (updated 2017)	Legislative Decree no. 82 of 7 March 2005	Codice dell'Amministrazione digitale	The decree recalls the need to draw up the Disaster Recovery Plan, the Operational Continuity Plan and the Emergency Response Plan - Archive/Library
2007, February 6	Circolare n. 30	Piani di emergenza per la tutela del patrimonio culturale - pianificazione e gestione delle esercitazioni	Emergency plans for the protection of Cultural Heritage - planning and management of training
2008, January 14	Ministry Decree	Linee guida per la valutazione e riduzione del rischio sismico	Guidelines for the evaluation and reduction of seismic risk
2012, May 29	Circolare n. 24 del Segretario Generale		The document establishes the permanent structure of coordination and general monitoring of extreme events
2013, December 12	Direttiva 12.12.2013 del Ministro per i beni e le attività culturali (Bray Directive)	Procedure per la gestione delle attività di messa in sicurezza e salvaguardia del patrimonio culturale in caso di emergenze derivanti da calamità naturali	Procedures for the management of safety activities and protection of cultural heritage in case of emergencies arising from natural disasters
2015, April 23	Direttiva 23.04.2015 del Ministro per i beni e le attività culturali	Procedure per la gestione delle attività di messa in sicurezza e salvaguardia del patrimonio culturale in caso di	



	(Franceschini Directive)	emergenze derivanti da calamità naturali	
2018, September 20	Civil Protection Department - Special Department of the Presidency of the Council of Ministers	Raccomandazioni operative per prevedere, prevenire e fronteggiare eventuali situazioni di emergenza connesse a fenomeni idrogeologici e idraulici	Operational recommendations to predict, prevent and deal with any emergency situations connected to hydrogeological and hydraulic phenomena

In Italy **disaster management** comprises the series of operative procedures for interventions to cope with any expected calamity in a particular territory. An **emergency plan** is the project of all the coordinated activities and of all the procedures that will have to be adopted to face a calamitous event expected in a determined territory, in order to guarantee the effective and immediate use of the resources necessary to overcome the emergency and the return to normal living conditions. Disaster management on **national level** assimilates the forecasting and prevention plans. It is the instrument which allows the authorities to prepare and coordinate relief operations for the protection of the population and the heritage in the affected area. Its main objective is to guarantee the maintenance of civilian life in a situation which means serious physical and psychological discomfort for the affected population.

The **national planning** has the objective to define and coordinate rescue operations and assistance to face a pending disaster, event classified as "Type C" (article 2, Law No. 225/92). "Type C" events must be dealt with special powers and tools due to their intensity and extension. If "Type C" events occur, the Council of Ministers decides on a state of emergency, determining duration and territorial extension. The national emergency plans are broken down by the different types of risks and interrelated to the specific Italian areas that are vulnerable to the specific risks. These break downs also put the dangerousness of the risk in a gradual impact with the identified regions. The territories in question are identified with the help of the scientific community. The national guidelines thus have to be implemented at regional, provincial and local levels and executed on the lowest level able to manage the calamitous event.

These **national emergency planning** ensures the mobilization of all components of the **National Civil Protection Service** as a single organization dealing with the emergency situation. The National Civil Protection Service thus combines national, regional and local institutions, volunteer organizations and private enterprises to give first and assistance to the Italian citizens. If necessary, international aid is coordinated by the National Civil Protection Service. At national, regional and local levels (municipalities). The Civil Protection Department is a structure of the Council of Ministers Presidency. It was founded in 1982 as a body capable of mobilizing and coordinating all national resources useful for providing assistance to the population in emergency events. The Civil Protection Department becomes the connecting point of the National Civil Protection Service, with tasks of guidance, promotion and coordination of the entire system (Law No. 225/1992). The Department, working in close collaboration with the Regions, deals with all activities aimed at forecasting and preventing risks, aiding and assisting populations affected by disasters and overcoming emergencies. The operational structures of the National Civil Protection Service are: the National Fire Brigade Corps, the Armed Forces, the Police Forces, research institutions and institutes of national importance with civil protection purposes, also organized as centres of competence, the National Institute of Geophysics and Volcanology and the National Research Council (CNR); the structures of the National Health Service; organized civil protection volunteering, included in the national list of civil protection volunteers, the Italian Red Cross Association and the National Alpine and Speleological Rescue Corps;



the National System for Environmental Protection; the structures in charge of managing meteorological services at national level. The National Civil Protection Service operates at national, regional and local level, in compliance with the principle of subsidiarity. The first response to the emergency, whatever the event's nature and extension, must be guaranteed at the local level, the institution closest to the citizen. The Mayor, in each Municipality, is the first person in charge of civil protection. However, when the event cannot be dealt by the municipality, the upper levels are mobilized through an integrated and coordinated action: the Province, the Prefecture, and the Region, up to the involvement of the State in the event of a national emergency. This complex system of competences finds its point of connection in the functions of direction and coordination entrusted to the President of the Council of Ministers, which uses the Department of Civil Protection. The **Civil Protection Code** (Legislative Decree No. 1, dated January 2, 2018) defines the mayors and presidents of the regions as **Civil Protection Authorities** who have to coordinate all activities in Civil Protection. Especially the regions have a very important role to play because they regulate the organization of the Civil Protection systems on their territory in all activities regarding forecasting, prevention, mitigation of risks, the management of the calamitous event itself as well as the aftermaths of the emergency. The **2018 recommendations from the Civil Protection Department** emphasise the necessity of cooperation and maximum commitment of all the components in the Civil Protection System to successfully deal with the increased and intensified precipitations which lead to high levels of vulnerability on the ground and cannot be predicted exactly, both in terms of location and spatio-temporal evolution. It stresses that non-structural actions, such as predicting and preventing, alerting of the citizens and communicating the risks, monitoring functional centres and territorial units are of fundamental importance.

Besides the above mentioned plans, issued by national authorities in Italy and valid for the whole country, there is first of all a decree of the Prime Minister from 2008 (n. 66/2008) in which a **national platform for disaster risk reduction** was established. The National Civil Protection Department was tasked with the duty of chairing a coordination panel, consisting of representatives of the various ministries in charge of defining the organizational structure of the platform and the platform charter. Cultural heritage protection is included.

In addition to the decrees and directives issued by national authorities, **national organisations** have developed a series of **guidelines for saving cultural heritage in calamitous events**, thus following the 2017 updated legislative decree n. 82 from 2005 which stresses the need to draw up Disaster Recovery Plan, the Operational Continuity Plan (Piano di continuità operativa), which are aimed at public administration and the need to implement the Emergency Response Plan for archives and libraries (**Piano di Risposta all'Emergenza - Archivio/Biblioteca**), abbreviated as PRE. The PRE features a series of clues for the behaviour immediately following an emergency. In 2013 the **Agenzia per l'Italia Digitale** prepared guidelines for the recovery of public administration after a disaster struck. In 2014 the MiBAC published guidelines for risk preparedness and reaction to disasters which aim at flood, collapses, volcanic eruptions, landslides, earthquakes and fires.³⁶ Following projects and studies about the security of archival and library assets (including the guidelines developed in 2014 by the General Directorate of Archives of the MiBAC), in 2016 the Archival and Bibliographic Superintendency of Lombardy has promoted and coordinated the drafting of guide lines aimed at drawing up "Risk management plans for archives and libraries".³⁷

³⁶ M. Calzolari, C. Prosperi (ed.) *Linee guida per la prevenzione dei rischi e la reazione alle emergenze negli archivi*. Rome: 2014. (the document can be downloaded at the following link http://www.archivi.beniculturali.it/images/pdf_articoli/servizio%20il%20gruppi%20di%20lavoro/emergenze/Linee%20guida%20emergenze.pdf).

³⁷ P. Mussini, L. Sassi, (ed.) *Piano di Conoscenza per la Sicurezza di Archivi e Biblioteche*. 2016 (the document can be downloaded at the following link <http://www.sa-lom.archivi.beniculturali.it/index.php?id=659>).



Concerning floods and flood prevention the Ministry of Environment published in 2010 operative guidelines for implementing the Directive 2007/60/EC, the so called **Flood Directive**.³⁸ This directive assesses and manages flood risks. A main objective is the mapping of the flood risk. It outlines an implementation path for measures culminating in a Flood Risk Management Plan (PGRA). The authorities responsible for the implementation of these measures are the **District Basin Authorities**. The single regions belonging to one of these River Basin Districts coordinate with each other and with the Department of National Civil Protection in order to provide preparation and implementation of the hydraulic risk warning system for civil protection purposes in their respective territory (decree 23 February 2010, n. 49, art. 3). These Flood Risk Management Plans comprise measures to reduce the potential adverse consequences of floods on human health, environment, cultural heritage, economic activities and infrastructure. The measures include prevention, protection, preparedness, assessment and post-event reconstruction. Each measure has a level of priority or timing of its implementation. Each measure is also linked with the authority responsible for its implementation.

Another national emergency plan valid only for certain regions of Italy is the **Vesuvius Emergency Plan** from 2001 (updated in 2007) by the Civil Protection Department, which aims first and foremost at the protection of the people from a possible eruption of the Vesuvius volcano.

Plans developed on national level have to be adapted and implemented on **regional and local levels**, with the mayors and the presidents of the regions being the relevant Civil Protection Authorities. In Italy 87% of the municipalities have an emergency plan.³⁹ **Municipal emergency plans** are prepared in accordance with the criteria and procedures set out in the operational guidelines of the Department of Civil Protection and by the regional governments. Emergency plans are an essential tool for the prevention of risks and the Department of Civil Protection monitors the building up of the plans and their updating closely via the regions and autonomous provinces in which the municipality is located. It is the Codex of Civil Protection (Codice della Protezione Civile, Decree n. 1/2018) that regulates the municipal emergency situations and operational provisions. These **emergency plans focus on the population** and indicate the spaces and structures the Civil Protection can use to assemble the population or its equipment. These plans have to be presented to the population, published online and communicated to the media. The disaster management plans on municipal level are flexible enough for use in all kinds of emergencies and consist of three fundamental parts:

1. A general part including all the information on the features and on the structure of the territory.
2. The lines of planning which allow for a suitable Civil Protection response to any emergency situation and the skills the various emergency responders have.
3. The intervention model which assigns the decision making responsibilities to the various levels of command and control, uses the available resources in a rational way and defines a communication system which allows a constant exchange of information. This model thereby regulates the whole response to the disaster itself.

The plans for disasters management operations

- Assign responsibilities to the different organisations involved and to individuals contributing specific actions during an emergency which exceeds the capacity of response or the competence of a single organisation,

³⁸ Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks". The purpose of this Directive is to establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community.

³⁹ Civil Protection Presidency of the Council of Ministers Department of Civil Protection, Update January 11, 2019 (<http://www.protezionecivile.gov.it/servizio-nazionale/attivita/prevenzione/piano-emergenza/mappa-piani-comunali/dati-dettaglio>; accessed 24.04.2019).



- Describes how the actions and the relations between the organisations are coordinated
- Describes how people and property are to be protected
- Identifies the personnel, equipment, skills, funds and other resources available for and these operations
- Identifies the initiatives necessary for improving the living conditions of evacuated people.

Collective training on local and regional level contributes to constant updating of the plans by confirming the validity of its contents and assessing the operational and managerial capacity of the personnel involved. The regular training also helps the personnel to be employed in an emergency to familiarise themselves with the responsibilities and jobs to be performed in an emergency.

4.5.3. Implementation of existing plans

The National and Regional Crisis Units have been active during the recent earthquakes in Central Italy. The Superior Institute for Conservation and Restoration (ISCR) of the Ministry for Cultural Heritage and Activities recovered, restored and protected artworks (paintings, sculptures, precious objects) from the places struck by the earthquakes.

4.5.4. Education and training

Collective training on local and regional level contributes to constant updating of the plans by confirming the validity of its contents and assessing the operational and managerial capacity of the personnel involved. The regular training also helps the personnel to be employed in an emergency to familiarise themselves with the responsibilities and jobs to be performed in an emergency.

Since 2007 the MiBAC also organises staff training and management exercises. Each organisational unit has to form teams with employees who then have to implement the evacuation and safety plans for both employees and visitors present at the place affected by an extreme event.

Finally, it seems useful to point out the activity carried out by the Fondazione Scuola dei beni e delle attività culturali (School of Cultural Heritage Foundation). The School adopts a multidisciplinary training model, achieving full integration between research, teaching and practical experience in the fields of heritage and cultural activities. Among the courses offered by the Foundation is the Scuola del Patrimonio (Heritage School).

The Scuola del Patrimonio offers training on cultural heritage issues with a multidisciplinary approach, combining lessons of a theoretical nature, seminar activities and direct experiences (internships) in order to develop the skills necessary for public administrations operating in the protection, management, enhancement and promotion of cultural heritage. Among the proposed courses there is risk management.⁴⁰

4.5.5. Summary Italy

Cultural heritage protection is coordinated on national level in Italy. In 2012 the crisis units of the MiBAC, the Italian Ministry for Culture and Tourism, was established and is responsible for the national coordination of a cultural heritage emergency. On national level it cooperates with the Comando Carabinieri Tutela Patrimonio Culturale, Ufficio nazionale beni culturali ecclesiastici, Fire Brigades and

⁴⁰ <http://scuolapatrimonio.beniculturali.it/?p=2477>



Civil Protection. Similarly structured units are available on provincial and local levels throughout the country and work together with the regional and local branches of the above mentioned entities. Cultural heritage protection itself is executed at the lowest level possible, meaning that the regional and national units only step in if the calamitous event is of certain size. The preparation of cultural heritage protection plans and measures lies with the owners and curators of cultural heritage, but is very efficiently supported by the nationally organised structures already mentioned and active in cultural heritage protection.

On the civil protection side mayors and presidents of the regions are the authorities coordinating all the activities on their respective levels. In 2008 a national platform for disaster reduction was established and 88% of all municipalities have an emergency plan. The big opportunity in Italy seems to be to include cultural heritage protection measures in these civil protection plans and to include cultural heritage protection also into the exercises of the civil protection and to aim at cultural heritage protection exercises bringing together the MiBAC coordinated units and the civil protection on the respective level, learning from the recent calamitous events like the earthquakes in 2016 which severely damaged cultural heritage and tested the MiBAC units to the core.



4.6. Slovenia

Also in Slovenia the responsibilities for cultural heritage lies basically with the owners or the curators. In cases of emergency the civil protection manages the overall situation and also informs, if necessary the Slovenian Institute of Cultural Heritage Protection which then takes care of all the immovable cultural heritage assets, whereas museums, archives, libraries and similar institutions take care of their own movable cultural heritage.

4.6.1. National organisation of cultural heritage protection

Slovenia is subdivided into 212 municipalities, of which 11 have the status of urban municipalities. The municipalities are the only bodies of local autonomy in Slovenia. Administrative districts do exist, but they are not an official intermediate unit between the republic and the municipalities, but subdivisions of national government administration.

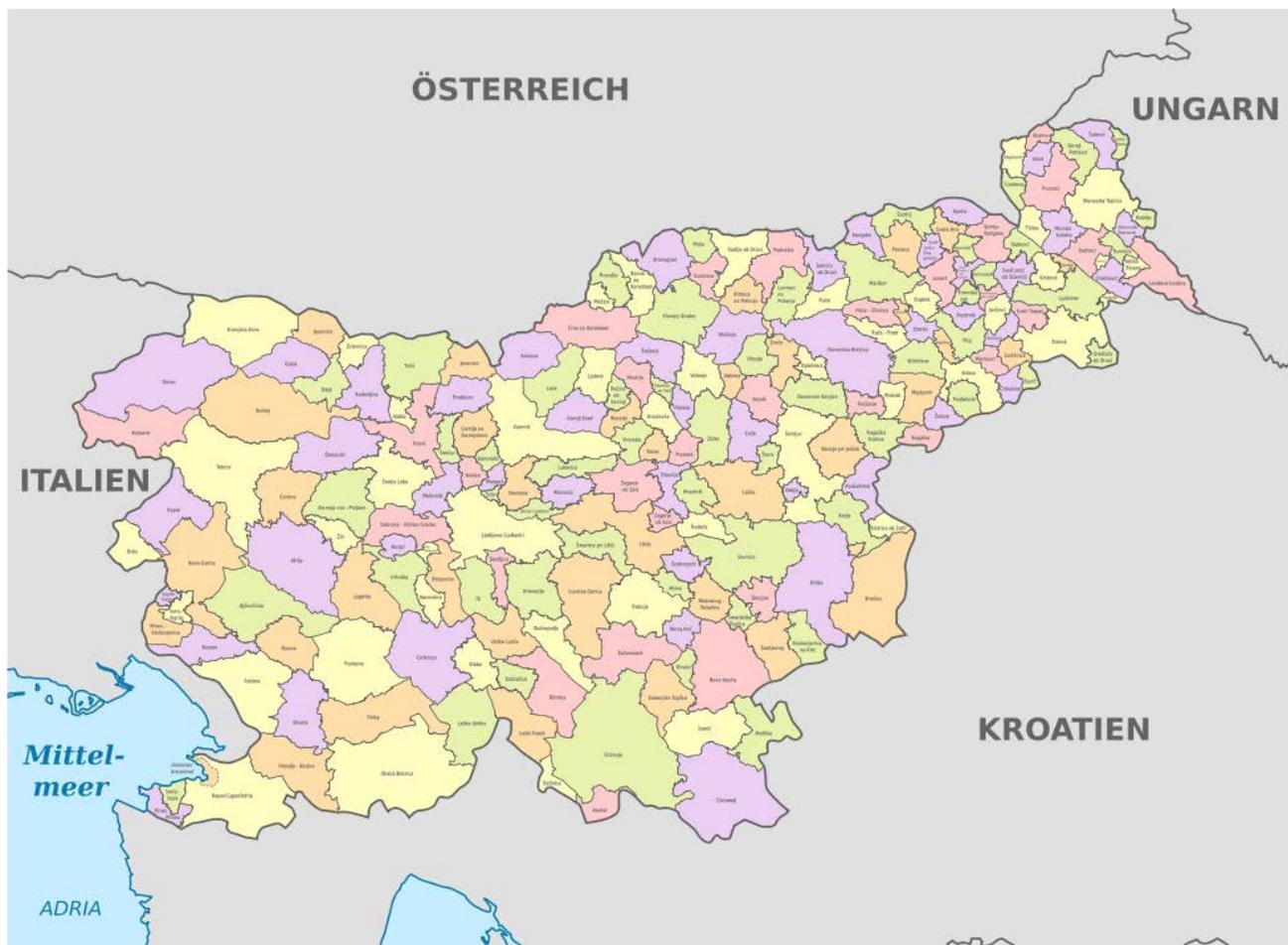


Figure 12: Administrative division of Slovenia.⁴¹

⁴¹ Di TUBS - Opera propria Questa grafica vettoriale non W3C-specificata è stata creata con Adobe Illustrator. This file was uploaded with Communist. Questa immagine vettoriale include elementi che sono stati presi o adattati da questa: Ajdovscina in Slovenia.svg (di TUBS). *Statistical office of the Republic of Slovenia: Rapid reports (12 March 2012, No. 3). Administrative territorial structure (No. 1). Territorial units and house numbers, Slovenia, 2011 - final data. (PDF), CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=19907641> (accessed 09.07.2019).



Public and private owners are responsible for the maintenance and renovation of their cultural heritage assets. In case of emergencies the Administration of the Republic of Slovenia for civil protection and disaster relief takes over the management of the situation and if necessary, they inform the Slovenian institute of cultural heritage protection. If any damage occurs due to natural disaster, the municipality gathers information about the damage done to the cultural heritage assets from all the owners and sends it to the Administration of the Republic of Slovenia for civil protection and disaster relief. If more than 50% of the county surface has been affected, they declare “national disaster” and secure funds for restoration.

The Slovenian Institute of Cultural Heritage Protection is responsible for all non-movable cultural heritage. The municipalities report damages also to them. They come to inspect the reported locations and write a report. In the report there are instructions, obligations and restrictions for the owner. They also cooperate with the owner in later stages of restoration.

Regional/local museums cover movable cultural heritage objects. In case of natural disasters, they take care of their assets. They have no power over private collections but try to cooperate with private owners.

4.6.2. Existing plans for managing cultural heritage in emergency situations

Slovenia has developed and implemented a number of **national plans and legislation** for the protection of cultural heritage and the protection of the country and its assets in general.

Date	Title	Focus	Content
1985	Rules on metrological conditions for isotopic measurements for density and humidity ⁴²	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Methodology on isotopic measurements for density and humidity
1992	Decision on transfer of certain tasks of protection and rescue to operational firefighting unit ⁴³	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Short definition of tasks of the firefighting units regarding protection and rescue
1994	The act on the protection against natural and other disasters ⁴⁴	natural disasters: <ul style="list-style-type: none"> • fire • flood • heavy rain radiological accidents poisoning	Organization and duties of the civil protection system
2004	The act on the protection of the environment ⁴⁵	Natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Hydrologic monitoring, responsibilities regarding environmental disasters

⁴² <http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV871>

⁴³ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ODRE815>

⁴⁴ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO364>

⁴⁵ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO1545>



2007	Regulation on the organization and functioning of the system of observation, notification and alarm ⁴⁶	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Responsibilities of national authorities and regional centres during disasters
2008	The cultural heritage protection act - ZVKD-1 ⁴⁷	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire armed conflict	Responsibilities of public cultural heritage authorities regarding natural disasters and armed conflict
2009	Policy on education and training in the field of protection against natural and other disasters ⁴⁸	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Rules of organization of education
2010	Resolution on the national security strategy of the Republic of Slovenia ⁴⁹	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire terrorism	National interests, description of different threats also from national distress
2012	Regulation on the content and the drafting of protection and rescue plans ⁵⁰	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	The organizations responsible and the content of the plans
2016	Flood risk assessment ⁵¹	flood heavy rain	Methodology for risk assessment, scenarios, evaluation, matrices, effects on health, economy
2016	Risk assessment of the Republic of Slovenia due to flooding ⁵²	flood heavy rain	Classification of municipalities according to hazard levels
2016-2022	The resolution on the national programme of protection against natural and other disasters in the years from 2016 to 2022 (ReNPVNDN16-22) ⁵³	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	The programme is based on the national security strategy and provides priorities and tasks

⁴⁶ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED4341>

⁴⁷ <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/84972>

⁴⁸ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV8718>

⁴⁹ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=RESO61>

⁵⁰ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED5994>

⁵¹ http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/voda/ocena_tveganj_poplave_2016.pdf

⁵² http://www.sos112.si/slo/tdocs/predlog_ocena_poplave.pdf

⁵³ <http://www.pisrs.si/Pis.web/pregledPredpisa?id=RESO116>



2017	The importance of hydrological forecasts for effective response in urban floods ⁵⁴	flood heavy rain	
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In addition to the national plans, Slovenia takes international regulations concerning climate change and cultural heritage into account for the national plans for safeguarding its natural and cultural assets.

Date	Title	Focus	Content
2007	Climate Change and World Heritage, Report on predicting and managing the impacts of climate change on World Heritage and Strategy to assist States Parties to implement appropriate management responses ⁵⁵	climate change natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Prepared by the UNESCO World Heritage Centre
2007	Protecting the cultural heritage from natural disasters ⁵⁶	natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Study prepared by the European Parliament's Committee on Culture and Education
2015	Risk assessment for museums in a time of emergency and planning measures in the event of natural and civil disasters and armed conflict ⁵⁷	national disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Article by Patrick J. Boylan, president of international committee for education (ICTOP)

The local plans of interest in this analysis focus on the pilot site of the municipality of Kočevje.

Date	Title	Focus	Content
2013	The environmental report for the municipal spatial plan of the Municipality of Kočevje ⁵⁸	flood safety cultural heritage natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Includes chapters on flood safety and influence of environment on cultural heritage
2016	Spatial plan of the Municipality of Kočevje ⁵⁹	spatial planning natural disasters: <ul style="list-style-type: none"> • flood • heavy rain • fire 	Use of land regarding plans for local development

⁵⁴ Presentation on national scientific conference in 2017 "National disasters in Slovenia"

http://nns.zrc-sazu.si/Portals/24/2017/05_Pogacnik.pdf

⁵⁵ <http://whc.unesco.org/en/climatechange/>

⁵⁶ [http://www.europarl.europa.eu/RegData/etudes/etudes/Join/2007/369029/IPOL-CULT_ET\(2007\)369029_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/Join/2007/369029/IPOL-CULT_ET(2007)369029_EN.pdf)

⁵⁷ http://www.sms-muzeji.si/ckfinder/userfiles/files/OCENA%20VEGANJA%20ZA%20MUZEJE_obj.pdf

⁵⁸ http://www.kocevje.si/sites/www.kocevje.si/files/u14/827.op_opn_kocevje_v7.1_1.pdf

⁵⁹ http://www.kocevje.si/sites/www.kocevje.si/files/u14/odlok_o_obcinskem_prostorskem_nacrtu_obcine_kocevje.pdf



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4.6.3. Implementation of existing plans

Kočevje itself and its cultural heritage assets are regularly threatened by flooding. Already in the 19th century and the first half of the 20th century riverbeds and drains were routinely cleaned and repaired after major floods. In September 1973 when the whole city of Kočevje was flooded, a big water retention system was built up-stream from Kočevje in Prigorica. Nevertheless Kočevje was flooded in 1974 and in 2010. After heavy rainfall in 2005 a big water barrier was built to regulate the water level of the river Rinža, flowing through the city. Besides heavy rainfall and floods Kočevje's cultural heritage is routinely threatened by storm, snow and exceptional hail.

Concerning the pilot site in Kočevje (heavy rain flooding cultural heritage buildings in the centre and heavy wind raising their roofs) there are no emergency plans for cultural heritage. The fire-fighters have no special instructions and have not enough equipment to work on more buildings at the same time. All buildings have obligatory plans of evacuation in case of fire and this could of course be used as basis for the cultural heritage emergency plans.

The firefighters and civil protection are well trained and act very professionally in all emergency situations. The preparedness measures are missing and much could be done in this field since there is interest both from the cultural heritage experts and the first responders.

One of the obstacles is that in case of emergency firefighters do not enter the buildings unless the owner gives them explicit permission. This could be resolved during the project and we can change this with a special authorization that could be given by the owner to the firefighters in advance. More things like this could be made with which we can also improve preparedness measures.

4.6.4. Education and training

The "Instructions for response and rescue in emergency situations" are a translation of the document "Emergency Response and Salvage Wheel" published in 2016 by The Foundation of the American Institute for the Conservation of Historic and Artistic Works. In Slovenia it was published by the International Council of museums ICOM - Slovenia and Community of Museums of Slovenia. The booklet was printed 1000 times and distributed. The instructions include natural disaster like earthquake fire and flood. The instructions are simple and include basic information and protocol. All general information is on one cardboard that was distributed to the firefighting units. It is not location specific.

The instructions include the following chapters:

- Disaster alert
- Safety first
- Getting started off-site
- Sterilize the building and environment
- Documentation
- Retrieval and protection
- Damage assessment
- Salvage priorities
- Historic building general tips



4.6.5. Summary Slovenia

So far there is no obligation to include cultural heritage planning into general emergency plans, but especially in training and awareness raising Slovenia has gone very far. There is a sound cooperation with the fire brigades, cultural heritage protection training is offered by individuals and NGOs.

The firefighters and civil protection are well trained and act very professionally in all emergency situations. The preparedness measures are missing and much could be done in this field since there is interest both from the cultural heritage experts and the first responders.



4.7. Poland

In Poland the owner, user or administrator of a cultural heritage object is obliged to prepare the appropriate plan under certain laws. Such obligation shall be also imposed on the managers/owners of museums, libraries forming the national library resources and archives. In order to regulate and unify the manner the plans for the monuments protection are drafted on certain levels of administration of the country, voivodeship, powiat, municipality and in the organizational units disposing of monuments, the Regulations for preparing and performing plans for the monument protection in the event of an armed conflict and crisis situations have been drafted; the aforementioned Regulations comprise an appendix to the said Regulation. The Regulations determine in details the structure as well as the manner of the plans draft (step by step). Compliance with the Regulations may allow to form a unified system for planning, conducting preparation works and responding in the event of an armed conflict or crisis situation. In order to do that, some elements that must be included in the plan in accordance with the certain stage of the administration on which the plan is being drafted, have been indicated. The Regulations include also the meticulous requirements, samples of documents, forms and tactical signs used in the graphical part of the plan. The Regulations use the definition of ‘a specific protection’ that consists in a preferential performance of planning, securing and rescue works on monuments that are particularly significant for national heritage. It is an important hint for the acceptance of priority criteria in the performance of the protection works on such type of monuments for the entities responsible for drafting the monument protection plans.

4.7.1. National organisation of cultural heritage protection

Poland is subdivided into 16 voidvodships, the equivalent to provinces and 380 powiats, most often translated as counties, which are further subdivided into 2478 municipalities.



Figure 13: Administrative subdivisions of Poland.⁶⁰

⁶⁰ <https://en.wikipedia.org/wiki/Poland> (accessed 17.04.2019).



4.7.2. Existing plans for managing cultural heritage in emergency situations

Poland has implemented a number of national and regional programmes and plans for the protection of monuments, tackling the challenges of harmonizing the regional emergency preparation plans and dealing especially with flood and heavy rainfall. Plans for cultural monuments protection in armed conflicts and crisis do exist on national and regional level.

On national level there is the **National Programme for Monuments Protection** for the years 2014-2017 as a key instrument for strategic planning in the field of monument's protection and allowed the harmonization of conservation policy on national level.⁶¹ National plans for spatial development and risk management aim at the reduction of risks from flooding and heavy rainfall in general, thus also including cultural heritage, especially the built versions. Two plans deal with the situations in Poland as a whole (Spatial Development of the Country⁶² and Risk Management Plan for the Vistula River Basin⁶³) and one deals especially with the Silesian Voivodship (Spatial Development Plan of the Silesian Voivodship⁶⁴).

Four regional plans are important for the district of Bielsko-Biala. The Water Maintenance Plan for the Area of the Regional Water Management Board in Cracow aims at providing real data and needs for the protection of settlements and infrastructure from flood and heavy rain. Its regional catchment area are the regions of the Upper Vistula, the Black Ora and the Dniester.⁶⁵

The District Crisis Management Plan for Bielsko-Biala is the tool for the governor of the district in the event of a likely or immediate threat that can only be managed with resources from several communes or which require the involvement of forces and resources beyond the capacity of the concerned commune in the Bielsko-Biala district. It deals with flood, heavy rainfall, fires and strong winds. The Flood Control Plan for the Bielsko-Biala district defines the activities of all entities engaged in flood protection. The plan spans all the phases from an occurrence of a flood, also caused by heavy rainfall, until the aftermath of the flood, where the relevant bodies and organisations are engaged in removing the effects of the flood. Bielsko-Biala also has a District Plan for Monuments Protection in case of armed conflict and in crisis situations. Amongst armed conflicts it focusses especially on flood, heavy rain and fires as man-made and natural catastrophes.

Concerning cultural heritage protection Poland has a very well developed system and legal background which will be explored in detail below:

In the Republic of Poland the plans for the management of protection of cultural heritage in crisis situations have been drafted. Those plans refer to museum, library, archival collections and monuments according to the act on 23rd of July 2003 on the monuments protection and care. In the regulation of the Minister of Culture dated on 25th August 2004 on organization and manner of the monument protection in the event of an armed conflict or crisis situations, the formation of a unified monuments protection system against the threats occurring in the period of peace and war has been adopted as a principle in the European Union member states. The protection of monuments in the

⁶¹ <http://bip.mkidn.gov.pl/pages/legislacja/programy-wieloletnie/krajowy-program-ochrony-zabytkow-i-opieki-nad-zabytkami.php>

⁶² http://rpo2020.lubuskie.pl/wp-content/uploads/2013/01/Koncepcja_Przestrzennego_Zagospodarowania_Kraju_203013.pdf

⁶³ <http://www.dziennikustaw.gov.pl/DU/2016/1841/1>

⁶⁴ <http://www.slaskie.pl/planzagospodarowania/files/zalaczniki/2016/09/26/1474878101/1474889767.pdf>

⁶⁵ http://dzienniki.slask.eu/WDU_S/2016/6845/akt.pdf



event of an armed conflict or crisis situation - according to the regulation - consists in planning, preparing and taking preventive, documentation, security, rescue and maintenance measures for the purpose of saving them from destruction, damage or loss. The major threat to the cultural heritage are various crisis events such as fire, floods, strong winds, construction disasters, blizzards, droughts, heavy rainfall, terrorist attacks or hybrid and war threats. The **basic document specifying a determined concept of the action by the public administrative bodies or organizational units is the protection plan in the event of an armed conflict or crisis situations**. The plan, drafted separately for immovable and movable monuments, includes in particular: the condition of resources under protection, real threats, intention to act, manner of performance, necessary forces and measures as well as costs and expenses for the performance of the planned activities. Adequately to the characteristics and scope of the activities performed within the organizational units disposing of monuments and on the certain administrative levels, the following documentation is drafted:

- plan for the protection of monuments of an organizational unit
- municipal plan for monuments protection
- poviats plan for monuments protection
- voivodeship plan for monuments protection
- national plan for monuments protection

The provisions of the regulation stipulate the procedures at the performance, arrangements and storage of plans and determine the terms of their update. The plan of an organizational unit disposing of monuments as well as the municipal and poviats plan are performed respectively by: a manager of such organizational units, voyt (mayor, president of the town). The plans need to be discussed with the voivodeship monument conservator and the appropriate field civil defense authority. The voivodeship plan of the monument protection is developed by the voivodeship monument conservator, in accordance with the arrangements made with the voivode and the Head of the National Civil Defense. The national plan for monuments protection is developed by the Minister of Culture and National Heritage. The Regulation is addressed particularly to institutions and natural persons disposing of monuments or managing monuments as well as to governmental administrative bodies - voivodes that ensure the monuments protection through the bodies of the monuments protection that subject to them - by the voivodeship monuments conservators. The provisions of the aforementioned regulation impose also the tasks in this regard on self-government bodies at the level of the municipality and poviats as well as on crisis management and civil defense bodies. The protection of monuments in emergency situations is carried out in four stages in a unified manner, adapted to individual levels of readiness, introduced by the competent crisis management bodies. At each of those stages, the administration bodies and managers of organizational units that hold monuments are obliged to perform the appropriate tasks defined by the provisions of the regulation:

- **The first stage:** prevention and performance of preparation works - takes place in the time preceding the occurrence of an armed conflict or a crisis situation. The activities of that stage include in particular the actions related to the draft of plans for monument protection and their update, monitoring and improvement of the technical condition of monuments, installing and maintaining functionality of devices and monument security systems, including detection and alarm signalling.
- **The second stage:** increase of readiness - implemented in the period of a direct threat intensification. The 2nd stage includes the following activities: disassembly and concealment of the most valuable architectural details and equipment elements; preparation and placement of the Hague Convention marking; collection and preparation of devices, equipment, packaging, materials necessary to perform the security works and rescue actions; provision of a threat monitoring, alarm and notice system; the appointment and preparation of teams for security works and protection activities.



- **The third stage:** response - occurring at the time of an armed conflict or crisis situation. During the third stage, the actions consisting in the conduction of rescue activities and provision of support for the firefighting and civil defense units are performed.
- **The fourth stage:** securing and reporting - occurs as soon as an armed conflict or a crisis situation ceases. The fourth stage includes particularly the following activities: preventing the monuments from the further destruction; reporting the events, losses and taken actions; informing the competent public administrative bodies, including in particular the voivodeship monuments conservator and founding bodies about losses, taken actions and possible aid needs.

The regulation stipulates also the list of additional actions and activities for the purpose of the movable monuments protection. Those include the following activities: preventing the monuments from their destruction or damage, at the place of their permanent storage; carrying the monuments into the other prepared premises of an organizational unit; moving the monuments to other selected and prepared objects in the same town. Yet if there is no possibility of their appropriate protection on the spot or in the same town, their evacuation to the indicated and prepared (in advance) premises (located in the place different from their permanent storage) should be planned and their permanent surveillance should be ensured.

4.7.3. Implementation of existing plans

Heavy floods and rainfall have affected the Silesian and Malopolska voivodships during the centuries. Since the 1813s documentation is available on flooding in the Vistula and Odra river basins, the Sola and Skawa. After the flood in July 1997 which affected the Vistula and Odra river basins, 25 km of flood embankments were rebuilt, 26 km of rivers were repaired and new flood embankments were built in Kaniów and Goczałkowice. After the flood which affected the whole of Central Europe in May and June 2010 antiflooding infrastructure was repaired and additional emergency equipment was acquired (pumps, boats, mobile power plants). The same renovation activities took place after the flooding of June 24 and 25 in 2013 and May 2014.



4.7.4. Education and training

In the Republic of Poland workshops and trainings concerning the draft and implementation of the plans for the cultural heritage security management in crisis situations are organized. On a state level the trainings are coordinated by the Ministry of Culture and National heritage. The trainings are addressed to the Voivodeship Monument Conservators, representatives of the Voivodeship Monument Protection Office responsible for the monument protection in the event of an armed conflict and crisis situations, managers of libraries forming the national library resources, managers of museums, representatives of the General Director of the National Archive and other state archives. On a voivodeship level the trainings are coordinated by the Voivodeship Monument Conservator. Those trainings are addressed to the owners and users of the monumental objects, local authorities responsible for the draft of the monument protection plans. The protection of library resources, both in the time of peace and crisis, is a starting point for planning. According to the act dated on 27th June 1997 on libraries determining issues related to the national library resources and necessity of their high protection and the Regulation of the Minister of Culture and National Heritage dated on 4th July 2012 on national library resources, those resources subject to specific protection consisting in the provision of particularly safe conditions in accordance to a given type of library materials for the purpose of their storage as well as for their sharing for scientific and exhibition purposes that will not cause deterioration of their condition nor their damage or stealing. The National Library and the Jagiellonian Library, as the first two libraries implemented to the national library resources, have been obliged to form the electronic register for the collections entered into the national resources. Other libraries are successively implemented to the national library resources and will contribute to the increase of objects forming one electronic base of library materials - the most important and the most significant ones for the national heritage.

In the scope of the collections protection and specific threats, the provisions of the aforementioned regulation make the libraries exercise the Plan for the protection of collections included in the national resource, according to very specific recommendations:

- possible threats to the resources and assessment of the risk of their occurrence;
- tasks and obligations of persons that perform the tasks in the scope of the protection of collections included in the national resources in a given organizational unit;
- human and technical resources as well as the measures that are necessary for the protection of collections included in the national resources;
- providing protection from the threats that are characteristic for a given region and object or group of objects, including a monumental object in which the collections included in the national resources are gathered;
- internal procedures for performance of tasks in the scope of the protection of collections included in the national resources;
- actions in the event of the occurrence of risk to the collections included in the national resources or crisis situation;
- providing the system for monitoring threats and for the threats warning;
- organizing the evacuation of people and evacuation of the whole or part of the collection included in the national resources from dangerous areas;
- a manner and type of assessment and reporting of the losses incurred within the collections included in the national resources as a result of the occurrence of risk or crisis situations.

4.7.5. Summary Poland

Poland has a very sound system of cultural heritage protection in place. Preparedness plans and emergency plans are mandatory for cultural heritage assets, the responsible ones are the users, owners, or curators. Also the training mechanisms for cultural heritage protection are well developed in Poland. The national level assists with checklists and plans in order to develop the relevant preparedness measures on the level they are needed on. On a domestic level, the following persons are engaged in the cultural heritage protection: Minister of Culture and National Heritage, General Director of State Archives, Director of the National Library in Warsaw, Director of the National



Heritage Institute, Director of the National Institute of Museology and Protection of Collections and other bodies of governmental administration, including the Head of Civil Defense. In the certain phases of crisis management the bodies of the Ministry of Culture and National Heritage cooperate with the bodies of the Minister of Interior and Administration (police, State Fire Service, other services) and with the bodies of the Ministry of National Defense (participation of the Armed Forces subunits in saving the collections). The volunteers of the Polish Committee of the Blue Shield, an international non-governmental organization dealing with ambulance, help and counselling programs for the endangered cultural heritage are involved in the protection of cultural heritage. The involvement of volunteering takes place in particular through the preparation of workshops, conferences and seminars devoted to the problem of cultural heritage in a situation of threat. The recent undertaking was the organization of the conference "Evacuation of collections in case of threats - law and practice" that took place in December 2018 and was participated by 114 people.



5. STRENGTHS AND WEAKNESSES

The **strengths** of the partner countries lie in sound systems of civil protection and emergency planning against all kinds of man-made and natural catastrophes. Emergency planning span all administrative levels and are either conducted in a bottom-up or a top-down approach, with the national level having a sound grasp on all the emergency procedures and responding entities in the countries.

Even if only a few partner countries have a fully developed system of emergency preparedness and execution for cultural heritage protection, the awareness for the ever growing necessity of the protection of the country's cultural heritage assets is mirrored in plans on different levels and a number of NGOs dedicated to cultural heritage protection in every partner country.

The **weakness** from the cultural heritage protection point of view is primarily the circumstance that preparatory measures are not mandatory in the partner countries. The owners and curators of cultural heritage are responsible for developing emergency plans for their cultural heritage assets, but this is not mandatory either. As a consequence, preparedness measures depend mainly on individual commitment. This applies also to cooperation and collaboration with local emergency responders, which in most cases is the local fire brigade.

Most partner countries do not have national guidelines that would help owners and curators to develop cultural heritage emergency plans and most also do not include the topic into the training of emergency responders or even live exercises from local to national level. Thus the topic exists in theory, but awareness and especially practical, hands-on approach, expertise and experience are missing.

6. OPPORTUNITIES AND RISKS

The analyses of the status quo in the single partner countries above has made clear that there is a large number of **opportunities** for cultural heritage protection and sustainable preparedness measures that can easily be prepared beforehand. Obviously ProteCHt2save itself holds a huge potential for the improvement of cultural heritage protection in the partner countries and Europe as a whole.

Each partner country has a sound structure for coping with natural and man-made disasters and a number of emergency responders and entities assisting during calamitous events. The topic of cultural heritage protection could in most cases be easily injected into the existing structures, resulting in a thorough coverage of the national, regional and local levels of administration and disaster response.

National or even European guidelines for helping the responsible stakeholders in developing the plans for their institutions should be developed and could also be made mandatory in the future. National and international events, like the fire in Paris' Notre Dame church on April 15th 2019 can be pivotal for raising the awareness of the need of cultural heritage protection measures.

The inclusion of the topic into already existing training schemes for fire brigades, civil protection and museum personnel is another big opportunity in every partner country. Training programmes for different entities do exist and can be easily expanded. Local to national table-top or live exercises are also a huge opportunity to enable first responders to deal with cultural heritage in a competent way.

Partner countries in which voluntary systems are pronounced might think about including volunteers into training programmes and the sustainable protection of cultural heritage in general.

ProteCHt2save develops material and tools to assist with all the above mentioned opportunities for better preparedness measures and protection of cultural heritage in the partner countries. Especially WP T3 with its deliverables D.T3.1.2 on transnational strategies and implementation of emergency plans for cultural heritage, D.T3.1.3 featuring the recommendations for rescuers, D.T3.2.1 on guidelines for Cultural Heritage Rescue Teams, which might also train volunteers in how to best handle



threatened cultural heritage objects if necessary, and D.T3.2.2 as handbook on best rescue procedures is to be named. On a more preparatory level D.T1.3.1 as manual for cultural heritage managers for mitigation and adaptation strategies, D.T2.1.3 as decision support tool for stakeholders and D.T2.2.1 as manual for good and bad practices for disaster resilience of cultural heritage risk assessment have to be mentioned especially.

The main risk that needs to be faced in this approach is that it always has to be made clear that people's lives, also the lives of emergency responders, come first. Cultural heritage is not more important than human lives, even if it defines a society and is an integral part of the different levels of society and the self-conception of the partner countries.