

PCP Forum 35/2020: PCP Shelters and Emergency Planning

Jean-Paul Theler: Editorial.	2
Laura Albisetti, Rino Büchel: PCP Shelters – Prevention Is Better Than Cure.	3
Tobias Wildi: Digital Heritage Preservation.	3
Olivier Melchior: Training And Emergency Planning – the Cornerstones Of Effective Cultural Property Protection.	3
Flavio Häner: Notfallverbund – an Important Addition To PCP.....	4
Michael Strobino: PCP Training Exercises – a Valuable Learning Experience.....	5
Beatrice Winter: The Notfallverbund Bern.....	5
Elke Mürau: Emergency Planning At the Swiss National Museum.....	6
Bernhard Preuss: The Barbarastollen – Special Protection For a Special Refuge.....	6
Rocco Leuzzi: Interdisciplinary. Inclusive. Innovative.	6
Michael Marek: A Deep Freeze For the World's Seeds.....	7

Jean-Paul Theler: Editorial.

Dear reader

The current *coronavirus* pandemic has shown how quickly a threat can emerge and how important it is to have practicable and effective emergency response measures in place.

This equally holds for cultural property protection. In the past, the mistake was to assume that everything was under control, adequate measures were in place to respond to a range of risks and dangers, and their effectiveness was tested during exercises and drills. Yet, major damage to and even the complete loss of iconic cultural heritage artefacts and sites, such as the fire in Notre-Dame Cathedral e.g., painfully showed that this thinking was misguided. Events like these demonstrate why sound emergency planning, although resource- and time-intensive, is critical.

The latest issue of PCP Forum takes an in-depth look at two key protective measures: cultural property shelters and emergency planning, both in Switzerland and abroad.

The public tends to perceive cultural property shelters as interchangeable with civil protection shelters. This overlooks two key differences. First, cultural property shelters are not emergency facilities; institutions like archives, libraries and museums use them every day as a secure storage site for the most valuable objects in their collections. Second, there are still too few protective facilities for cultural assets. The revised Civil Protection and Civil Defence Act (CPDA) seeks to redress the situation by extending the provision on the establishment of shelters for state archives to cover collections which the PCP Inventory classifies as being of national importance.

Switzerland is one of the most pioneering countries in the world when it comes to the protection of cultural property. A good example of this forward-linking approach is the Federal Microfilm Archive, which the cantons entrust with copies of its microfilms. However, the growing digitisation of processes and working methods challenges this tried and tested back-up strategy. The 2019–2023 National Strategy on the Protection of Cultural Heritage addresses the issue of safeguarding digital content and calls for the development of protective facilities for digital cultural property along the lines of the ‘safe haven’ instrument for the temporary storage of threatened cultural assets belonging to other countries. These two initiatives set an example that signatory states to the 1954 Hague Convention and UNESCO could follow.

Swiss PCP efforts also focus on the development of well-informed plans to respond to events that pose a risk to cultural property. Although the federal authorities may issue guidelines and provide assistance in this regard, it is incumbent on the institutions themselves to take responsibility for their holdings and storage facilities.

The present issue of PCP Forum presents several examples of these kinds of measures, such as emergency and evacuation planning, as well as the *Notfallverbund* (regional heritage emergency task force), an instrument commonly found in the German-speaking world whereby members pledge to assist one another respond to an emergency situation in their institution. PCP Forum also clearly shows that the protection of cultural property is, and always will be, an important and shared responsibility that requires the federal government, cantons, communes and cultural institutions to work together in order to preserve and defend the interests of cultural heritage deserving protection.

Laura Albisetti, Rino Büchel: PCP Shelters – Prevention Is Better Than Cure.

The first PCP shelters began to emerge in Switzerland in the late 1960^s. These efforts benefited from federal support and had to satisfy pre-defined technical norms. Today, the federal government continues to provide financial assistance, but project must meet several criteria to qualify: the proposed facility must be intended to store collections that are of national importance in the PCP Inventory; the site must be suitable for such a facility and not exposed to any kind of hazard; and the operator must have an emergency plan in place by the time the shelter enters into operation.

The overhauled Civil Protection and Civil Defence Act (CPDA), which is scheduled to come into effect on 1 January 2021, provides for federal funding to cover not only the acknowledged additional costs that cantonal archives and holders of cultural assets of national importance incur due to building and renovation work on their PCP shelters but also the costs for the correct storage of movable cultural property. The PCP and Buildings Sections of the FOCP have jointly developed a set of guidelines on that subject.

Other key examples of the prevention instruments deployed by the PCP Section of the FOCP are the Federal Microfilm Archive in Heimiswil and the provision, in collaboration with its partners, of a temporary ‘safe haven’ for endangered cultural property from other countries.

Tobias Wildi: Digital Heritage Preservation.

Many movable cultural artefacts and almost all safeguard documentation these days are generated, recorded and archived using digital technology. Conventional safety measures like physical safety, correct storage conditions and microfilming do not work for digital heritage. New measures are therefore needed. A 2020 study by the Protection of Cultural Property Section of the FOCP explored what form a national plan to preserve digital heritage could look like. In the end, it proposed the creation of a purpose-built digital storage facility.

This new depository must meet a number of specifications. First, it should be spread over several sites so that organisational and technical responsibilities are not concentrated in one place. Second, it must have the mechanisms needed to guarantee the integrity of the data and carry out regular checks in this regard. Third, it should deploy, where possible, sustainable and resource-efficient technologies, i.e. that have a long life cycle and consume little energy. Last but not least, the fixed costs associated with mass data storage should be kept to a minimum.

As the agency in charge, the FOCP could oversee the incremental implementation of the project, which could take the form of a ready-to-launch pilot operation.

Olivier Melchior: Training And Emergency Planning – the Cornerstones Of Effective Cultural Property Protection.

In May 2012 the Federal Council approved the post-2015 civil protection and civil defence strategy report. A central focus of this study was ensuring that Switzerland is well-equipped to mount an efficient and effective response to technological, natural and man-made disasters and emergencies.

Political developments and natural and disaster-induced events in recent years like the war and destruction in Syria and Mali, and the fires in the National Museum of Brazil and Notre-Dame Cathedral in Paris, have propelled the subject of cultural property protection to centre stage. Efforts to prevent the damage and loss of our material and cultural heritage are critical to safeguarding our

cultural identity. The UN Security Council also considers cultural property protection as a key element in keeping international peace and security. In 2017 it issued Resolution 2347, urging the States to ratify the Protection of Cultural Property Convention and its Protocols and to implement the measures set out in the Convention and in the Second Protocol.

Switzerland's national civil protection strategy identifies cultural property protection as a central task for civil protection partners. The 'Civil Protection 2015+' training plan aims to standardise civil protection instruction in Switzerland. The cantons run foundation and specialisation courses for PCP personnel. PCP specialists have the option to train as non-commissioned PCP officers, which then opens the door to PCP officer (formerly 'PCP Head') training. The duration of civil protection training courses is now longer and the quality of their content improved. Thanks to these reforms, Switzerland should be able to count on well-trained civil protection personnel and a more autonomous and mobile civil protection system.

In addition to facilitating the adoption of a more standardised organisational structure (squad – platoon – company – battalion), the redesigned PCP training plan aims to improve the operational readiness of PCP personnel within the civil protection system. Adjustments were made to the civil protection organisational structure and a uniform training plan was devised together with the cantons. Course content covers, among others, the provisions of Art. 4 of the Protection of Cultural Property Ordinance (PCPO); the FOCP Training Unit in Schwarzenburg oversees course organisation and provision.

In November 2018 the Federal Commission on the Protection of Cultural Property (EKKGS) and the PCP Section of the FOCP issued their national PCP strategy. It covers three distinct fields of action – prevention/preparedness, deployment and aftercare – and draws on the PCPA and its requirement that the cantons devise emergency plans for their most important cultural assets. However, the strategy goes much further than emergency planning *per se*. It seeks to facilitate the adoption of an integrated approach to risk management, including binding minimum standards for PCP. Consequently, emergency planning is only one part of this comprehensive three-phase strategy.

In principle, the strategy is aimed squarely at cultural institutions. It is important to ensure that the organisation mainstreams integrated risk management across all its activities, and sets out all relevant management principles and duties.

Cultural institutions of national and regional importance that are listed in the PCP Inventory serve as a role model for cultural property protection efforts. Management is responsible for developing and implementing the PCP plans for their institution.

Flavio Häner: Notfallverbund – an Important Addition To PCP.

In the early 2000⁵, a new PCP instrument emerged in the German-speaking world, the *Notfallverbund*. These are regional networks that bring together archives, libraries, museum and other cultural institutions, which pledge to assist each other respond to an emergency situation in one or more of the member institutions.

In the event that the cultural property of one or more members is endangered or incurs damage, the other institutions in the *Notfallverbund* step in and provide them with the personnel and technical support they need to deal with the situation.

The delivery of this back-up support is based on a mutual aid pact signed by all network members. However, their work is not limited to reciprocal emergency assistance; members of the *Notfallverbund* also coordinate their preparedness efforts. This involves consulting the emergency

response services, devising emergency plans based on the outcomes of these discussions, co-ordinating the delivery and procurement of operational resources, providing their personnel with basic and advanced training and organising joint exercises and drills. Through their operational and emergency planning activities, these regional heritage emergency task forces are perfectly placed to play an important role in protecting cultural property.

Although Switzerland has been slow to adopt the *Notfallverbund* concept, Germany has over 40 regional heritage emergency taskforces; they are an integral part of the cultural property protection structure. What follows are a detailed description of this concept and a review of the experiences that the canton of *Basel-Stadt* has acquired since 2018 when it began planning its own *Notfallverbund*.

Michael Strobino: PCP Training Exercises – a Valuable Learning Experience.

Disasters and emergencies can strike institutions and their collections at any time. This is why it is so important that they have sound emergency response plans in place. To test the effectiveness of this core document, full-scale training exercises must be included in the development process. The insights derived from these drills can inform real-life emergency operations and improve all aspects of the response.

The present article details several exercises that have taken place in the canton of Geneva over the last ten years. For example, the *Bibliothèque de Genève* held a large-scale evacuation drill in November 2012, involving all civil protection partners. There have also been several emergency response operations like the precautionary evacuation of a storage facility belonging to the University of Geneva library, and the removal of more than 500 paintings in May 2015 due to the threat of the swollen River Arve bursting its banks. March 2018 saw the evacuation and treatment of water-damaged archives, and in July of the same year religious artefacts were rescued when a fire broke out in a church. The following June, action had to be taken to protect and rescue cultural artefacts in response to the flooding of one of Geneva's most important museums following a violent thunderstorm.

This hands-on, real-life experience ensures that personnel are well-equipped to safeguard cultural property efficiently and effectively should an emergency strike.

Beatrice Winter: The Notfallverbund Bern.

In Bern seventeen institutions have joined forces and set up their own *Notfallverbund* (regional heritage emergency task force). The mission of this organisation is to offer its members emergency response assistance that is reciprocal, swift, selfless and free of red tape. *Notfallverbund* activities serve as a complement to fire service and civil protection/protection of cultural property measures.

Members meet between once and several times a year to share experiences and contribute to working groups that endeavour to bolster cooperation with other partners, particularly the fire service and PCP professionals.

The focus of *Notfallverbund Bern* efforts going forward will be the establishment of a shared emergency storage facility.

Elke Müräu: Emergency Planning At the Swiss National Museum.

When the Swiss National Museum opened its collection centre in Affoltern am Albis in 2007, it devised an emergency plan so that the facility would be able to respond effectively to various scenarios like fires and flooding. Twelve years later, it reviewed these original plans, revised them multiple times, refined them and put them to the test in a series of training exercises. The museum also set up a network and liaised more closely and regularly with emergency response organisations, cultural property protection officials and partner museums. It runs training courses which are given by both internal and external specialists and aimed at not only its own staff but also the PCP personnel from the civil protection organisation assigned to the museum.

PCP emergency planning is an ongoing process within the Swiss National Museum. However, the everyday activities of the institution and other priorities mean that advances are made in small but steady increments. This in no way compromises the desired outcome of these efforts, namely the further development and professionalisation of the museum's preparedness activities. These labour-intensive preparations for an eventuality which everyone hopes will never happen would not be possible without the constant support of the museum's management.

Bernhard Preuss: The Barbarastollen – Special Protection For a Special Refuge.

Zentraler Bergungsort der Bundesrepublik Deutschland (Central Storage Site of the Federal Republic of Germany) – in Germany's Black Forest is the safest and most secure storage facility in the country and the largest microfilm archive in Europe. It is one of the few refuges in the world that is under UNESCO special protection, as provided for in the Hague Convention on the Protection of Cultural Property in the Event of Armed Conflict (1954). This underground bunker serves as a secure depository for federal safeguard microfilms. To preserve their key documents of overwhelming national and cultural historical importance for posterity, the federal authorities and all of Germany's *Länder* make photographic and readable copies on stable and durable microfilm, which are then handed over to the *Barbarastollen* for safekeeping.

The following article explains the fundamental thinking behind the Hague Convention and the requirements that a refuge like Germany's Federal Microfilm Archives, must meet to receive special protection from UNESCO.

The practical application of these provisions in Germany heavily depends on the use of this former mine as a secure storage facility for federal safeguard microfilms service. The article also details the special requirements that this type of storage facility must meet, as well as the challenges and measures specific to refuges. It also explains why the *Barbarastollen* is well-suited to the long-term preservation of microfilm records.

Through these safeguard microfilms and the *Barbarastollen* refuge, the Federal Office of Civil Protection and Disaster Assistance makes a major contribution to protecting Germany's written heritage.

Rocco Leuzzi: Interdisciplinary. Inclusive. Innovative.

Setting salvage priorities must be an essential part of the emergency planning activities of museums and collections. Sadly, certain events make it impossible to save everything.

Institutions should therefore adopt a standardised approach to decision-making by applying a set of evaluation criteria that takes account of the specific nature of each object. In addition, all decisions

should be based on solid technical foundations, which means that responsibility for the process should fall to the technical directors.

The following article draws on the MSc thesis of the author, which examined how the evaluation process could be standardised. He based his research on the State Collections of Lower Austria, which have over six million objects in their possession that span a wide range of disciplines, including ancient history, Roman archaeology, cultural and contemporary history, natural history, as well as art from the Middle Ages right through to the present day.

It is preferable not to base evaluation criteria for collections as heterogeneous as those of Lower Austria on defined values like artistic value. Instead, the relevance of the influencing factors should be calculated and weighted. This would guarantee that even diverse collections can be mapped clearly and a salvage priority list drawn up according to criteria that take account of the nature of the objects under evaluation.

Michael Marek: A Deep Freeze For the World's Seeds.

The remote island of Spitsbergen is home to the Svalbard Global Seed Vault. Close to 1.2 million seed samples, including maize, rice, wheat and other crops from 249 countries, are stored inside this deep-freeze in the Norwegian permafrost, where the temperature remains at a constant minus 17.9° Celsius. Secured behind massive steel doors and safe from the effects of earthquakes, acid rain and radioactive radiation, this global “doomsday” vault is a back-up seed safety deposit box in case a disastrous event, such as armed conflict (as happened in Syria), floods, volcano eruption or major power failure, were to destroy one the 1,700 or so gene banks around the world. According to Crop Trust director Stefan Schmitz, “The loss of a crop is as irreversible as the end of the dinosaurs”, who singles out Afghanistan and Iraq to prove the point; the gene banks in both countries were destroyed during their respective wars. In the Philippines, a severe typhoon wiped out the country’s seed vault, including its extensive rice collection.

However, the seed banks could be re-established thanks to the ‘spares’ in the Arctic seed vault. The mission of this facility, which is run by the Global Crop Diversity Trust, an independent and international foundation based in Bonn, is to safeguard crop diversity, forever.

In 2006 Norway began building the vault at a cost of EUR 6.3 million; it entered into service on 26 February 2008. The first country to deposit seed samples was Estonia; Switzerland joined in 2009. Each country and their relevant organisations decide on the samples that are stored in the vault. However, genetically modified plants are not allowed.

Other supporters of the Global Crop Trust are companies like DuPont Pioneer and Syngenta. However, both have attracted criticism due to their genetic engineering operations. The capital stock of the Trust is currently valued at more than USD 300 million. The USD 12 million donation from Switzerland pales in comparison to the amounts paid in by Norway and Germany, the Trust’s largest donors.