



# REPORT (DELIVERABLE D.T2.3.1)

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Awareness raising events for fostering  
transnational cooperation in disaster  
risk reduction

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## 1. Introduction

In the context of WP T2 *Tailoring and Implementing strategies for cultural heritage protection in transnational plans for disaster risk management and reduction*, activity A.T2.3, which concentrates on the cooperation among stakeholders involved in the decision making for cultural heritage protection, this deliverable D.T2.3.1 aims at reporting the awareness events organized locally in the countries involved in the project with the aim of fostering the proactive cooperation among different actors and levels in the decision making process for the protection of cultural heritage at risk.

This document presents the following goals:

- To outline the significance of transnational cooperation including its added values and expected impact.
- To identify the standing needs for transnational cooperation in Europe concerning cultural heritage vulnerability and protection.
- To review the existing transnational solutions and tools for CH in Europe.
- To formulate a transnational concept for CH vulnerability in Central Europe, discussing the current issues to be tackled, possible improvements and an optimal framework in which to encompass cross-border activities.

This deliverable, titled *Awareness raising events for fostering transnational cooperation in disaster risk reduction*, presents concise reports of the 7 awareness events (section 2) from each of the countries involved in the project, shortly describing the topics discussed and the stakeholders involved, the CH management issues at local level evidenced during the event, the strategies or measures that could be enforced to tackle these issues and finally some observations for enhancing the upstreaming to national policies.

The following table summarizes the 7 awareness raising events conducted from April to December 2021, involving up to 197 people working in the CH sectors in Europe.

<b>STRENCH Partner</b>	<b>Country</b>	<b>Date of the event</b>	<b>Total participant (n°)</b>
<b>CNR-ISAC</b>	Italy	25 November 2021	45
<b>DUK &amp; SISTEMA</b>	Austria	28 April 2021	40
<b>MoD</b>	Croatia	23 December 2021	20
<b>ITAM</b>	Czech Republic	07 December 2021	8
<b>LRA FO</b>	Germany	23 September – 10 October 2021	25
<b>LBDCA</b>	Hungary	28 September 2021	49
<b>UIRS</b>	Slovenia	01 October 2021	10

Finally, section 3 draws the main conclusions on the challenges experienced in Central Europe and on the possible integration of potential mitigation strategies into national policies for the sake of fostering transnational cooperation in disaster risk reduction.

In Annex, all the individual reports for each country event is available.



## 2. Awareness raising events

### 2.1 Austria

- Introduction

#### **Description**

Date: April 28th, 2021

Venue: Online

Involved STRENCH PPs: DUK & SISTEMA (PP3 & PP5)

The awareness raising event was organised as joint event with the Interreg Alpine Space project CHEERS, for which the Austrian Institute of Technology acted as co-organiser of the event. The event was held as a live online discussion between distinguished experts in the fields of disaster risk reduction for cultural heritage and transnational cooperation from Austria, Germany, and Switzerland, thus focussing on the German speaking part of Europe, which also had the benefit of creating no language barrier for the panel discussion and the following discussion with the audience of the event.

#### **Target stakeholders**

Stakeholder typology and count:

Higher education and research; interest groups including NGOs; local public authority; regional public authority; national public authority; international organisation, EEIG under national law; general public; SME.

- CH management issues at local level

Aside from natural hazards organizational shortcomings such as the lack of a general plan for the protection of cultural heritage, neither on regional nor local level, as is the case in Austria were identified. In the Case of the pilot site Wachau the CH owners are responsible for the protection of these with no liability to inform the authorities on existing plans. There are no national guidelines for the development and implementation of such plans. One of the main points of discussion surrounded the necessity of cultural heritage protection from both man-made and natural disasters and on possible contributions to the development of guidelines for emergency preparedness plans for both movable and immovable heritage. Although management plans for the UNESCO World Heritage sites in Austria exist, to which the Wachau cultural landscape belongs, these do not necessarily take the issues of cultural heritage protection into account. Therefore, the resulting emergency plans are limited in their scope by mainly focusing on fighting various local natural catastrophes with lacking emergency preparedness and/or evacuation plans in place for CH assets. This is the result of a lack



cooperation and insufficient knowledge transfer between the various parties/stakeholders involved in CH protection.

- **Strategies/measures**

Transnational cooperation between organization involved in the CH protection can be first step in enhancing the preparedness and resilience of CH at risk and it is a measure that is easy to implement, aiming at raising the awareness of different stakeholders in the field of cultural heritage protection and bringing to their attention what similar entities in other countries have faced, have developed and implemented against a number of threats.

The awareness raising event aimed at bringing together experts and stakeholders in disaster preparedness and cultural heritage protection from Austria, Germany, and Switzerland and to highlight current developments and situation, especially in cultural heritage protection preparedness.

As such the event was successful since different stakeholders from German speaking countries connected and further exchange details and expertise and lessons learned.

The Austrian Burghauptmannschaft for example, which is responsible for the upkeep and management of inter alia the former Imperial castles in Vienna and Innsbruck, got in contact with the Fire Brigades from Bavaria, enquiring about details on how the German colleagues prepare cultural heritage for fire and water damage. As a follow up on sharing of experience and related documents, the Burghauptmannschaft Austria now develops a short training programme for their staff regarding cultural heritage protection and firefighting. Similar incentives are foreseen and expected to happen in the upcoming months and years.

Topics tackled in the event, which is to be seen as one of the first measures to overcome identified issues in the management of risks for cultural heritage sites (in that case the Wachau area, but on a regional level Eastern Austria and on an international level the German speaking countries of Central Europe) included:

- What is cultural property and what is the difference to cultural heritage?
- Which legal status do both hold?
- Who decides what cultural property and heritage is?
- Which criteria should be considered when deciding on the status of cultural heritage?
- How to prepare an effective emergency plan for a cultural institution.
- Which criteria are used for prioritising objects?
- How important is the emotional and personal component in preparing cultural heritage for disastrous events?
- Which role does the civil society play in cultural heritage protection and disaster preparedness?



- How to assess threats to cultural heritage.
- Examples of cultural heritage and natural heritage monitoring using different types of satellite data?
- What will be the biggest threats related to climate change coming towards us during the next 50 years?
- What does the Group on Earth Observation Coordination contribute to the Group on Earth Cultural Heritage Initiatives?
- What role does cultural heritage protection hold in the EU Commission as research field?
- What is the importance of cultural heritage for the Austrian Ministry of the Interior? How is it reflected in the crisis preparedness plans of Austria?
- Which roles can emergency responders play in cultural heritage protection?
- How best to build bridges between the different stakeholders (academia, emergency responders, cultural heritage responsible)?
- How does the situation regarding preparedness and cultural heritage protection look like in Austria, Germany, and Switzerland?
- How to use satellite data in and for cultural heritage protection.
- **Upstreaming at national policy levels**

Existing barriers seem to be first and foremost missing awareness on the topic of cultural heritage and the necessity of its protection; this does not hold true for all the sites in question though, since the Wachau has been threatened by numerous natural catastrophes over the decades. However, most of the time cultural heritage was not damaged or the number one item threatened, thus Austria and especially the Wachau region, have been very fortunate. On the other hand, this sometimes leads to missing awareness regarding the importance of preparedness measures. A very sensible approach at the moment seems to be to highlight the importance and benefits that are to be gained by implementing sustainable preparedness measures on the different levels and by trying to identify methods and tools that can be used by private persons as well as public institutions and emergency organisations likely to be called in for assistance if cultural heritage is threatened or damaged.



## 2.2 Croatia

- Introduction

### Description

Date: 23/12/2021

Venue: Online

Involved STRENCH PPs: MoD (PP9)

The online event took place on 23.12.2021 and lasted from 11 a.m. till 3 p.m.

### Target stakeholders

Stakeholders who participated in the event (a total of 20) came from different sectors (public, private, civil). There were four representatives of local public authorities (Municipality of Dugopolje, City of Split, City of Kaštela, City of Omiš), two representatives of sectoral agencies (Local Development Agencies), three small enterprises, one NGO group promoting cultural heritage.

- CH management issues at local level

One of the main issues of conservation and management of cultural heritage at local level is general lack of information in the decision making for cultural heritage protection. For instance, there is a strategy created at the local level concerning risk due to extreme events: "Civil Protection Action Plan municipality of Dugopolje". Although the plan has detailed state analysis, a description of responsibilities and measures in case of risk or danger, cultural assets are not mentioned specifically in the context of protection. Despite the fact that many of these measures are certainly being implemented and helping to combat extreme events, there are still a number of challenges that hinder the building of the resilience of cultural heritage sites. Representatives of the public sector pointed out that the problem so far has been the lack of data on cultural assets, i.e. the lack of data hindered the correct risk assessment and made it hard to determine adequate measures. Representatives also agreed that new knowledge gained through the STRENCH methodology could help improve the local system of cultural heritage protection. The following problem highlighted was lack of coordination between stakeholders involved in the cultural heritage protection and civil protection in general. In the local disaster management system, volunteer firefighter associations play important role but they are not included in the cultural heritage protection planning and their work is usually limited to general damage mitigation. There is also a lack of awareness of the local population about the value of local cultural heritage. Since the hamlet of Kolići is uninhabited, the local population does not pay too much attention to the place itself, the surrounding area and vegetation are left to "themselves" and therefore are additionally vulnerable to external influences.





- **Strategies/measures**

Possible steps, as mentioned above, could use new knowledge about cultural heritage vulnerability and possible risks (which could affect the site due to climate change in the future) to create new, soft resilience building measures in existing strategy at the local level, concerning the protection of cultural heritage. These measures could include empowerment of the capacity of the public and private sectors in mitigating the impact of climate change and natural risks on cultural heritage. Workshops and education could also be conducted with the aim of raising awareness and knowledge about the process of cultural heritage protection through the education of the local population, but also professional staff. Mapping of the pilot site and surrounding area would also help in raising awareness about possible weaknesses of the area. Adaptation measures to preserve site from erosion might include changes in land use (especially abandoned agricultural land) and planting trees to stabilize slopes since the region is susceptible to landslides, a natural hazard whose occurrence could be affected by climate change. There is also a need to strengthen monitoring and maintenance of cultural heritage and possibly include cultural heritage protection training exercises.

- **Upstreaming at national policy levels**

Since no representative of the national level participated in the event, it was more difficult to discuss the possibilities of implementing the presented local measures at the national level. Yet, participants agreed that measures outlined at local level could be used for other parts of region other than the one investigated, especially where similar hazards and heritage construction types can be found. Also, some types of mentioned adaptation measures can be generalized into regional/national policy, for example, strengthening monitoring and maintenance of the sites. Still, the main problem is that adaptation strategy at the governmental level concerning cultural heritage and climate change doesn't exist. For that reason, example of the plot and local measures in this case could primarily be used for rising awareness of methodologies incorporating climate change adaptation, they could bring more information and guidelines on adaptation of cultural heritage to climate change, respectively contribute to protecting the values, integrity, and authenticity of cultural heritage on regional and national level. Also it is important to notice that there would be some difficulties in generalizing all measures from local to regional and national level due to the diversity of typologies of cultural heritage, the different geographical locations of heritage assets and the context in which they are located, and the climatic conditions to which they are exposed.



## 2.3 Czech Republic

- Introduction

### Description

Date: December 7, 2021, 14:00

Venue: Online

Involved STRENCH PPs: ITAM (PP2).

Main topics discussed:

- Presentation of EU activities fostering disaster risk reduction in the CH field
- Information on recent European research in the protection of CH against disasters
- Information on planned European research in the protection of CH against disasters
- Transnational support to CH risk management issues at local level
- Gaps / Drawbacks existing in the management of the site at risk due to extreme events
- Strategies / Measures for overcoming the identified gaps and drawbacks
- Opportunities / Barriers for enforcing the local strategies into regional / national policies

### Target stakeholders

Risk management stakeholders.

- CH management issues at local level

According to the local risk management experience, there is still a lack of knowledge about the needs of cultural heritage protection in endangered areas. The identified deficiencies relate mainly to the assessment of the hazards at specific locations and the evaluation of the intrinsic vulnerability of CH objects. Moreover the lack of evacuation routes and temporary storages prove to be a common issue, particularly during the emergency phase of the disaster. The lack of knowledge strongly affects also the recovery phase, such as for example the absence of or insufficient level of guidance for the implementation of compatible damage remediation activities. Incomplete contingency plans have also been flagged as a potentially dangerous issues for CH management, which commonly address exclusively fire risk. Finally, the above mentioned issues at local level are mostly accompanied by a chronic lack of funding for preventive measures.

- Strategies/measures

Prevention, including technical and non-technical measures, is considered to be the basic strategy for mitigating or eliminating damage. Technical measures are proposed in three areas



- reducing the effects of the disaster on monuments (protective elements - permanent and temporary dams, shelters), - increasing resilience (reinforcement, rapid rescue equipment), - maintaining the optimal condition of buildings (regular maintenance). Non-technical measures mainly include preparedness for danger at all levels - local territorial state administration and self-government, administration of facilities, public involvement, training of rescue teams and volunteers, education. Supplementing contingency plans with less likely risks, publishing manuals - for example, the owner's manual has been published in six language versions for project partners.

- **Upstreaming at national policy levels**

The protection of cultural heritage is still not perceived as one of the priorities for rescue in crisis situations. There is a significant amount of family cultural heritage, the protection of which is only in the hands of the owners. An opportunity to save this heritage is to raise awareness of the possibilities of preventing or repairing damage while preserving cultural and historical values. This would require the creation of specific nationwide programmes addressing specifically the engagement of non-technical users, such as owners and managers, which through the support of different support tools (e.g. guidelines, video tutorials, apps) can be enabled to respond actively during the preparedness, emergency and recovery phases of disasters. Specific offices of the Ministry of Culture, the Ministry of Interior and the Ministry of Education could team up, involving the National Heritage Institute, the Army and Universities for the development of appropriate funding schemes, training programmes and dissemination activities. Also the participation of the civil society and local associations of heritage owners and enthusiasts should be of paramount importance for the design and implementation of effective policies at national level.

## 2.4 Germany

- **Introduction**

### **Description**

Date: 23/09/2021 and 10/10/2021

Venue: various

Involved STRENCH PPs: LRA FO (PP8)

The focus of the awareness rising event lied on strategies for the protection of the unique and invaluable cultural landscape covering the District of Forchheim. Climate threats and climate adaption measures were introduced to regional politicians (23.09.21; 15 participants) and to the interested society as part of the climate action week (10.10.21; 10 participants).



The awareness rising event was structured into two major parts, the first describing climate related and natural hazards facing the District of Forchheim while in the second part climate adaption measures and sustainable management strategies were presented.

### **Target stakeholders**

Target stakeholders reached were regional politicians.

- **CH management issues at local level:**

The awareness rising event clearly demonstrated, that responsibilities for adapting the cultural landscape to climate related hazards are often not clear or even assigned. For example, flash floods are obviously a threat facing the cultural landscape of the district of Forchheim. Flash flood mitigation is quite a complex topic which needs many decentralized measures, for example the creation of many, but small retention areas in the landscape or a soil cover of at least 30% over the whole catchment area, which is in particular important during winter. However, there is no institution or authority being responsible for managing decentralized flash flood protection measures in the district of Forchheim, so far.

Another example is fire prevention in forestry. In the district of Forchheim so called low- or middle but also natural forests are part of the cultural landscape. In case of fire prevention, fire barriers across forests are an effective measure. However, also in this case, there is no institution/organization being responsible for establishing management measures for avoiding the spread of fire across the forests in the district due to fire barriers.

Moreover, climate related threats should be considered more intensively in planning processes. Planners need awareness regarding climate change and climate risks. Land consumption - with the loss of cultural heritage sites and the intensification of local floods - for example is an untackled issue and not considered seriously in planning processes.

It was also claimed that some mitigation measures are hardly affordable. For example wind machines or candles are measures for mitigating late frost damage in fruit cultivation. However, wind machines or candles are very expensive and thus being not seriously considered as adaption measures in many cases.

- **Strategies/measures**

All in all, new responsibilities must be named due to changing or new climatic threats. This new threats must be considered as serious problems which should be tackled for the protection of the cultural landscape, particular in planning processes. Additionally, funds are necessary for the implementation of climate adaption measures and sustainable risk management strategies.

- **Upstreaming at national policy levels**

Assigning responsibilities and the consideration of climate related hazards in planning processes must be the major aim to be implemented into national policy levels. Much efforts



are necessary to convince politicians of providing funds for such a policy as in many cases manpower and funds for the implementation of measures are necessary.

In Germany there are different levels of planning, e.g. urban planning, regional planning and landscape planning. Climate hazards must be considered in all levels of planning. For example urban planning should be responsible for not building further residential or industrial areas in areas of flood risks. Regional and landscape planning could be responsible for the integration of decentralized highwater mitigation measures in regional or landscape plans.

## 2.5 Hungary

- Introduction

### Description

Date: 28/09/2021

Venue: Local Government of Siófok, address: 8600 Siófok, Fő tér 1.

Involved STRENCH PPs: LBDCA (PP6)

Title: Preparing for the effects of climate change and protecting our natural and cultural heritage

### Target stakeholders

Total number of participants: 49

The composition of participants was the following: Regional Public Authorities (Somogy-, Veszprém-, Zala and Baranya County Governmental Offices) (9); local Public Authorities (Zala County Government and Local Government of Fonyód, Zala, Dióskál, Balatonvilágos, Gyenesdiás, Balatonalmádi, Siófok) (10); Higher education (University of Pannonia) (1)

NGOs, civil organizations (7); National public authorities (Prime Ministry Office, National Directorate General for Water; Management, Central Transdanubian Water Management, National Meteorological; Service, Balaton-Uplands National Park Directorate) (4); Infrastructure and (public) service provider (Disaster management directorates, Hungarian Fire Brigade Association, Settlement operation Ltd.) (3); Sectoral Agency (LBDCA, Völgy Hangja Development Council) (10); SME and other organizations (private companies, Lake Balaton Fish-Management Nonprofit Ltd.) (3); media (1); citizens (1)

- CH management issues at local level:

- In the surveyed area flash floods and heavy rain, lightning and wind are the main risks. In the lower part of the nature reserve, the water from the creek may spill over, however this doesn't threaten the cultural heritage buildings on site.



- In case of heavy rainfall flash floods could form on the agricultural lands above which could erode the soil, and because of the slopes the runoff water can damage the vegetation below and especially the walls and foundations of the mansion.
- The maintenance of the area and vegetation is currently the task of the municipality, however there is no support from experts (ecological, forestry, plant protection, nature conservation).
- Maintenance management of 130-year-old trees is incomplete.
- The mansion building is basically stable, however the plaster of the exterior, especially the rear walls of the building shows signs of damage and needs to be renovated.
- Artefact databases are available, however, these are only available to first responders and rescue plans do not include them.
- **Strategies/measures**
  - Regulating the farming practices in the area above the mansion could reduce potential soil erosion in the event of a flash flood.
  - Because of the topographic features of the area a small, continuous ditch would also significantly protect the masonry and the foundations of the mansion buildings.
  - Experts should be involved in the maintenance of the area and vegetation in planned and regulated manner.
  - Regular maintenance treatment of old trees is recommended.
  - Improving the physical protection and the condition of external walls of the building is recommended.
  - Improving the rescue plans of the mansion building is recommended.
  - It is also recommended to inform and possibly involve the local population in the rescue plans to some degree.
  - Preparation for drastic changes the local flora and fauna due climatic conditions is recommended.
- **Upstreaming at national policy levels**
  - It is recommended to build complex plans using nature conservation, monument protection data and evaluating disaster management surveys.
  - It is advisable to specify the tasks in a clear written plan which involves the owner/operator and the local municipality. Note that in the case of Zichy Mansion, the two are not the same.
  - Nature conservation and cultural heritage experts need to be available and included in the complex rescue plans as well.
  - Further exploration and assessment of the relations of topography, soil, groundwater and surface water in terms of vegetation and building vulnerability is recommended.



## 2.6 Italy

- Introduction

### **Description**

Date: 25/11/2021

Venue: Online (GotoMeeting platform). The event was planned to be an offline meeting in Venice, but the uncertainty about sanitary situation of this period suggested converting the meeting in digital modality.

Involved STRENCH PPs: ISAC-CNR and FVG (PP1 and PP4)

This Roundtable event, organized by CNR ISAC, aimed to promote cooperation and exchange of expertise between the different actors involved in the decision-making process at different levels for the protection and safeguarding of cultural heritage at risk as a result of extreme events related to climate change. The event focused on the following topics: 1.Actions during and after emergency: analysis of errors and lessons learned during the field experience; 2.Main gaps still exist in the management of cultural and landscape assets at risk due to climate change from regional to national level; 3.Action plans, measures, and strategies to fill and overcome the identified gaps; 4.Integration of specific measures for the protection of Cultural Heritage in the National Plans for adaptation and mitigation to climate change.

### **Target stakeholders**

Reaching the goal of the target stakeholders expected for this kind of event, the participants (panelists and attendees, for a total of 45 people) in this roundtable came from the Cultural Heritage management and policy-making sectors representing different administrative levels: local (Cervia municipality, Venice Superintendence, first responder and public park manager), regional (District Basin Authority, research consortium) and national ones (Ministry of Culture, Research institute and several universities).

- CH management issues at local level

Along all the Roundtable, some issues and gaps related to the management of the sites at risk were presented and discussed by the panelists and the moderator. In particular, it was observed that during and after the emergency, the activation of the procedures is normally fast and efficient in coordinated way between authorities, first responders and volunteers. In this sense, the MiC introduced their dedicated directorate, and how different kind of damage on CHs can be managed. Conversely, the preparedness to extreme events before the emergency seems to be still challenging. Carabinieri force and Superintendence, together with CORILA, expressed their opinion about the work to be done before the emergency and pointed out the need to avoid as much as possible the emergency.



So, a gap in the preparedness between strategies pre-event and after-event was highlighted. This happens both for Cultural heritage and Natural Heritage.

Some examples have been presented related to the flooding in Venice, the heavy rains in terraced landscapes in Liguria and in the historical park in Bologna.

Another example was presented by the municipality of Cervia which introduces how the municipality can comply with the current regulations about landscape regulation. They are focusing their attention to resilience approach, urban regeneration and sustainable mobility. This comprehensive strategy will target to adaptation measures, rather than mitigation measures in order to protect the intangible a tangible cultural heritage of the area (salt pans, beachside, historical pinewoods, etc.).

- **Strategies/measures**

In general, it was pointed out that ‘Disaster preparedness’ has three main elements:

1. Forecasting events and issuing warnings.
2. Taking precautionary measures in response to warnings.
3. Improving response by organising and strengthening capacity to deliver timely and effective rescue, relief and assistance.

Disaster preparedness for CHs therefore has two main aims: to protect the Cultural Heritage to avoid damage and wrecks; and to put plans, resources and mechanisms in place to ensure that when affected CH receive adequate response. It is assumed that some property will be vulnerable to disasters, despite mitigation measures.

On this basis, depending on the kind of CH to be taken into consideration (i.e. natural, man-made, etc.), some inputs coming from the roundtable were registered:

*a) Building, urban area*

- Improving the physical protection and the condition of external walls of the building is recommended.
- Improving the rescue plans of the building is recommended.
- Sharing data and methodology for vulnerability assessment is required.
- Providing emergency and post-emergency support to the sites of the heritage affected by natural phenomena is suggested.
- Identifying those heritage sites most vulnerable to phenomena induced and aggravated by climate change and strengthening control systems, through monitoring (in situ and remote) and early warning of impacts is suggested





- Fully incorporate the latest approach models climate, earth sciences and EO in adaptation strategies, as well as in the procedures for the appointment, registration and management of the sites of the World Heritage in order to ensure sustainable use a long term in a future climate change scenario.

*b) Terraced landscape, parks, natural heritage*

- Regular maintenance treatment of old trees and periodical census is recommended.
- Because of the topographic features of the area, regular maintenance treatment of old facilities or the use of new techniques is recommended.
- Availability of adequate economic resources for the implementation of maintenance and care of the green on the basis of adequate management plans is recommended
- Synergy with the various subjects in charge of territorial governance and with the competent technical offices is recommended
- It is also recommended to inform and possibly involve the local population in the rescue plans to some degree.
- Preparation for drastic changes the local flora and fauna due climatic conditions is recommended.
- Regulating the farming practices in the area above the mansion could reduce potential soil erosion in the event of a flash flood.
- Experts should be involved in the maintenance of the area and vegetation in planned and regulated manner.

A crosscutting suggestion is linked to the training and tailored skills to be created, in order to reach a high level of preparedness in any situation (before, during and after emergency) at different levels (technical, decisional, operational level) for both Natural and Cultural heritage. An important remark was expressed for the private property like the terraced landscape. In this case, the training should be addressed to site owners or workers who should be more supported with information on restoration techniques and with economical resources due the public importance of these structures.



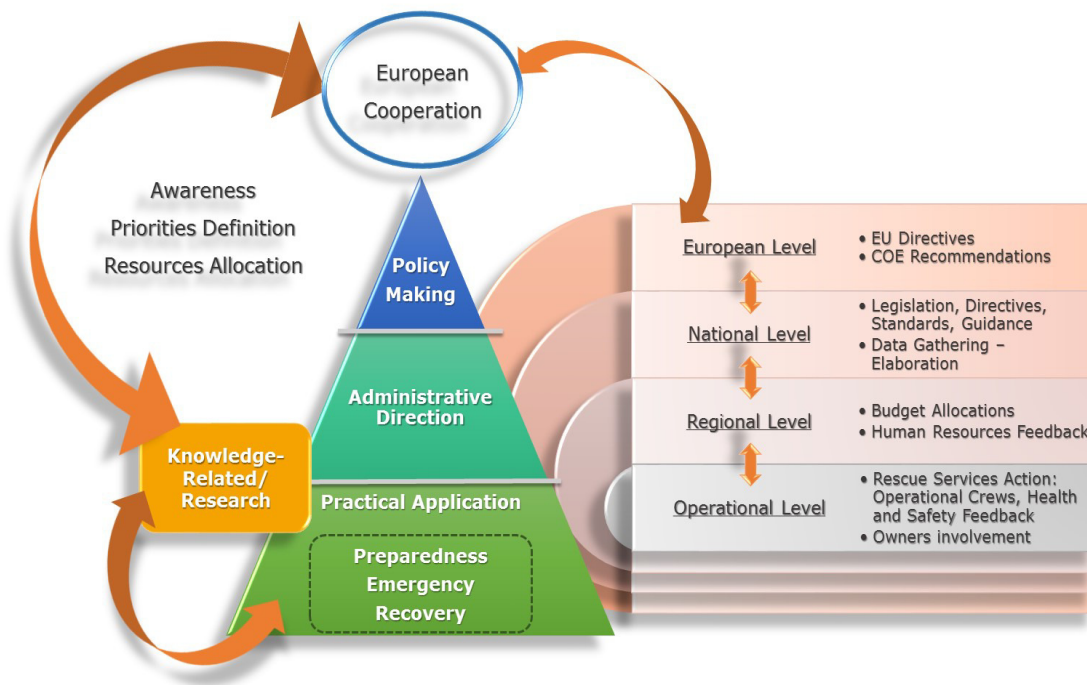
- **Upstreaming at national policy levels**

The participants agreed that the improvement of the coordination and the collaboration among the different authorities involved will support the adoption of local strategies and measures.

The integration of the existing measures and plans at local level into the regional/national disaster and risk reduction strategies should start from the 4 drivers reported in the study *“Safeguarding Cultural Heritage from Natural and Man-Made Disasters - A comparative analysis of risk management in the EU”* presented by Erminia Sciacchitano:

1. The lack of coordination between and across the different (European, National and Regional) strategies of risk management policies in most countries.
2. The lack of alignment in the responsibility chain from policy making to practical application.
3. The low current priority of cultural heritage in risk management planning.
4. The lack of integration of cultural heritage protection measures into risk management strategies

Pointed out these 4 key lessons learned to maximise synergies between the political, governmental and operational levels in the field of disaster awareness an **integrated approach** is required, as illustrated in the diagram below:





Additionally:

- Support of politicians, local administrators and citizens
- Mitigation is no longer sufficient in the short to medium term: we must necessarily think about adaptation
- Modern urban planning faces an important, complicated and fascinating challenge: to think in terms of resilience of urban systems by enhancing the identity of the territories by raising the quality of the public city and courageously trying a cost-benefit analysis in the evaluation complex urban transformations which evidently cannot find the sole satisfaction in land rent
- The involvement of local communities is important for raising awareness on the issue of climate change, for the knowledge and protection of the historical, cultural and landscape identity heritage, also through public-private partnerships.

## 2.7 Slovenia

- **Introduction**

### **Description**

Date: 01/12/2021

Venue: Online

Involved STRENCH PPs: UIRS (PP7)

The awareness-raising event was hosted by the Urban Planning Institute of the Republic of Slovenia on December 1st, 2021 online. The main topics were cultural heritage management in Slovenia, strategies, and measures for tackling the impact of extreme weather events on CH, and relations local -national policies.

### **Target stakeholders**

10 participants joined the event. The participants are working at local municipalities, regional agencies, NGO, and ministries. Participants are active/working in the fields of cultural heritage management, cultural heritage promotion, natural hazards, spatial planning, and environmental planning.

- **CH management issues at local level**

In the Vipava river basin, there are five significant flood risk areas concerning also cultural heritage. According to the Slovenian natural hazards indication map, there is a likelihood of



rare floods. The upper stream of the Vipava River and its tributaries were already regulated in the past. Flood protection is an issue in the lower part of the basin, where floods have become more frequent and several severe floods occurred in the past years. These floods are a result of changes in the precipitation regime as a consequence of climate change.

- **Strategies/measures**

The majority of responsibilities for immovable heritage protection are divided between the Ministry of Culture, municipalities, and the Institute for the Protection of Cultural Heritage of Slovenia. Owners (public or private) are fully responsible for the maintenance, management, and strategic development of cultural assets. Main issue in the management of the CH at risk due to extreme events is that risk management, natural hazards and CH issues are regulated by several departments; it is regulated by several laws: Cultural Heritage Protection Act, Spatial Planning Act, The Environmental Protection Act (SEIA). The protection of Slovenian cultural heritage is also regulated by the Act on Protection Against Natural and Other Disasters.

Cooperation between different organizations involved in CH protection is important, also cross-sectional cooperation and communication are crucial in supporting the activities for the protection of CH at risk. Participants discussed that natural disasters as floods and wind are present in Vipava Valley for centuries and are well tackled in national and local documents. The Vipava river basin is managed with the Vipava River Basin Management Plan and its Program of Measures according to the EU Water Framework Directive that has been completely integrated into Slovenian legislation through the Waters Act. There are also other sectorial strategic plans related to water management, as The Flood Risk Management Plan, Natura 2000 Management Programme, and other sectorial documents in agriculture and forestry.

- **Upstreaming at national policy levels**

As already written above natural disasters as floods and wind are present in Vipava Valley for centuries and are well tackled in national and local acts and documents. The important barriers seem to be a lack of funds for private as well as public entities.



### 3. Conclusions

The awareness raising events organized within the framework of the STRENCH project allowed discussing relevant topics related to risk mitigation and to engage local, regional and national authorities in defining possible solutions for the implementation of national policies dedicated to the safeguard of cultural heritage.

Management issues at local level were thoroughly discussed. Firstly, major challenges in the preparedness strongly impact the ability to adequately protect CH. In particular maintenance schemes have been deemed insufficient, incomplete or not backed by appropriate knowledge. Lack of awareness among the general public and the lack of information also exacerbate the threats posed to cultural heritage. Additionally, it has been observed how the management flow and regulations are often overcomplicated leading to unclear responsibilities.

Interesting points were raised concerning the possibility of improving risk management for cultural heritage. Training and tailored skills need to be created, in order to reach a high level of preparedness in any situation (before, during and after emergency) at different levels (technical, decisional, operational level) for both Natural and Cultural heritage. In particular, training should be addressed to the private sector, such as owners or managers, who should be more supported with information on restoration techniques and with economical resources.

During the awareness events, upstreaming of local strategies at national policy level, was deemed of great importance. Firstly it is required to maximise synergies between the political, governmental and operational levels in the field of disaster awareness by employing an integrated approach. The involvement of local communities is important for raising awareness on the issue of climate change, for the knowledge and protection of the historical, cultural and landscape identity heritage, also through public-private partnerships. Assigning responsibilities and the consideration of climate related hazards in planning processes must be another major aim to be implemented into national policy levels. Much efforts are necessary to convince politicians of providing funds for such a policy as in many cases manpower and funds for the implementation of measures are necessary.