Public document

Report on the application of the tool for assets evaluation in Val d'Ubaye and prioritization of interventions

Final contribution for CHEERS project

Deliverable D.T1.2.2

BRGM/RP-69528-FR
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Geoscience for a sustainable Earth

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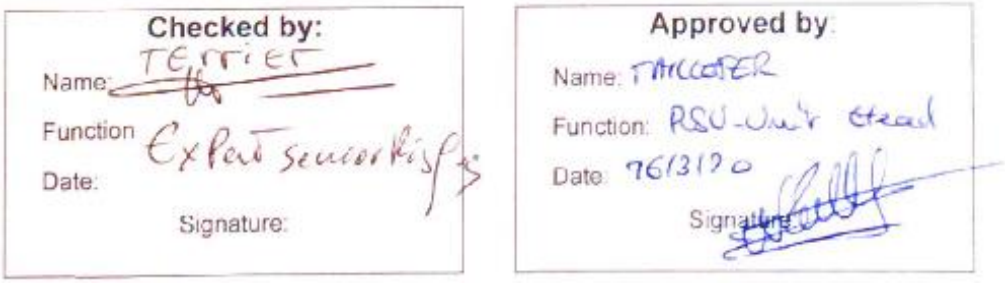
Study carried out as part of
Alpine Space "CHEERS" project, BRGM 2019 RP18MSL003

C. Iasio, C. Mirgon
With the collaboration of
F. Rivet, F. Favier, F. Donnadieu, T. Cavalli, H. Homps



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Contact : qualite@brgm.fr

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Resume

This document is contributing to a deliverable of Interreg Alpine Space CHEERS project

It contains the description of the work done together with the other French partners and the concerned entities involved in the Ubaye Valley, in order to apply and test the relevance assessment methodology developed within the scope of CHEERS project. It has been applied on a group of cultural elements exposed to different sort of natural hazards of Ubaye Valley, by involving a concerned representation of local stakeholders. This work was finalized by a day long workshop, which included the participation of local decision makers and resulted in priority list of value criteria and relevant cultural heritage elements.

According to the template designed by the coordinator of this Activity, the document includes the description of the target area and goods, the criteria for the selection of participants to the workshop and the results. In attachment, in French, is copy of the documentation (in French) they received for preparing their participation.

Preface

Alpine Space Programme.
CHEERS: Cultural HEritagE. Risks and Securing activities

Cultural Heritage is the ground of people's identity and strongly contributes to Alpine economy. But natural disasters represent a major threat to these resources.
Risk assessment, hazard reduction, and disaster management focus their attention on the protection of human lives and infrastructures, while the safeguard of cultural resources has not been properly tackled yet. The project focuses on this gap.

Activity A.T1.2: Set up of methodology for the evaluation of cultural assets and prioritization of securing & salvaging interventions

The value of assets at risk (identity, historical value, income generation potential) is one of the main drivers in orienting decision making on safeguarding interventions. Based on a comparative review of available methodologies, the activity synthetizes a reference concept and a tool for cultural heritage evaluation and consequent prioritization of safeguarding interventions. The tool is produced in a prototype version, tested on pilot areas, among the other, Ubaye Valley (French Alps) and made available for Alpine communities.

Keywords: Cultural heritage, Multi-risk assessment, Prevention, Val d'Ubaye

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Contents

1. Introduction

The Interreg « Alpine Space » funded project « CHEERS - Cultural HEritagE. Risks and Securing activities" is aimed to making Alpine Cultural Heritage secure and resilient in front of Natural Disasters and Climate Change scenarios.

Despite the big amounts of data and information already available, the topic of securing cultural heritages exposed to risk scenarios is still often managed in a short effective way. For local communities those assets can represent both richer identity and source of tourism income. Nevertheless, at the Institutional level a clear awareness of the vulnerability of cultural heritages exposed to risk scenarios is often missing and Public Bodies lack efficient mechanisms to effectively manage securing activities in alert or emergency phases. Recent regulations highlight the relevance of this topic. The EU Flood Directive (2007/60/CE), as an example, mentions cultural heritages as one of the categories on which "to establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences". The projects aims at dealing with this criticality: it is intended to promote new cooperating procedures that should involve Cultural Institutions and Civil Protection and to activate innovative approaches and tools to secure cultural heritages affected by natural risks, also in climate change scenarios.

In order to establish correctly this cooperation, the first step is the co-definition of methodologies that allow prioritizing the interventions on cultural heritage at risk, both in prevention and emergency response. The specifications of such a priority list result from the intersection of cultural heritage curators criteria and first responders needs. Starting from such a different point of view, the two communities need to find an agreement on:

1. the recognition of the relevance of the elements at risk;
2. the actual irreversible loss of value, due to a certain type of impacts, which will be different according to the material constituting the hit element and the chemical-physical process triggered by the accident.

In order to make the two communities converging on the 1st point, within the scope of the Activity A.T1.2, the CHEERS partners agreed on a participatory methodology for defining the relevance of a cultural asset. To test it, in each pilot area of the project, the CHEERS partners organized a workshop by involving cultural heritage experts and risk management decision makers concerned by local cultural heritage and risk management plan, respectively.

In France, this exercise concerned the Ubaye Valley, and was carried out on the 11th December 2019.

2. Pilot area

The pilot area selected for the implementation of field activities related to CHEERS project is a surface of 1013 sqkm in the heart of Haute Provence, French Alps, just to the border with Italy (Province of Cuneo, Piedmont Region), hosting 13 municipalities aggregated in the "Community of Municipalities of Ubaye Valley and Serre-Ponçon (CCVUSP)" (fig. 1):

- Barcelonnette, which is the main urban district, located in the barycentre of the valley;
- Jausiers;
- Saint-Pons;
- Faucon-de-Barcelonnette;
- Les Thuiles;
- La Condamine-Châtelard (Sainte-Anne);
- Uvernet - Fours (Pra Loup);
- Enchastrayes (Le Sauze);
- Méolans-Revel;
- Le Lauzet-Ubaye;
- Val d'Oronaye (Fusion de Larche et Meyronnes);
- Saint-Paul-sur-Ubaye;
- Ubaye Serre-Ponçon (Fusion de La Bréole et Saint-Vincent-les-Forts).

Figure 1: Municipalities aggregated by the CCVUSP, representing the portion of the Ubaye Valley considered as pilot area for CHEERS in France.

It is a territory of the Alps located on the southern part of the massif and has altitudes above 3 400 m. Barcelonnette (seat of sub-prefecture) is located in the center of the Ubaye watershed at an altitude of 1 135 m. The valley has a strong mountain climate with Mediterranean influences. It is subject to different climatic events such as Atlantic disturbances, Mediterranean lifts and return from the East. This confers variations in temperature, degrees of intensity of precipitation, drought. Its geology includes formations of different characteristics: alpine basement with tectonic faults and black marl of the tertiary at the origin of many landslides.

Bordered by the Serre-Ponçon lake, one of the largest artificial lakes in France, and by the Mercantour National Park, this territory is recognized as « Pays d'art et d'histoire » (Country of art and history). Ancient pilgrimage and commercial exchanges routes, intensive emigration in Latin America (mainly Mexico), and decades long cross-border conflicts characterized the history of this area. The remarkable number of very different type of vestiges that nowadays mark this relatively small territory, provide a multiform cultural heritage landscape that seems very representative of the cultural richness of the Alps.

The CCVUSP territory was advised as CHEERS pilot area during the meeting organised with the French Observers in January 2019, within the scope of the A.T.1.3 (see D.T.1.3.1 for details), in consequence of its rich cultural heritage as well as its exposure to several types of natural hazards which produced already episodes of damaging intensity.

The recurrent risks in the area depends on:

- earthquakes;
- earthflows and rock-falls;
- extreme rainfalls, triggering flash-floods, mud-flows and debris flows;
- intensive snowfall and consequent avalanches;
- wildfires.

They are predisposed by the geology and the geomorphology of the area, and most of them worsened with the climate change.

3. Managing stakeholders

The partners of CHEERS found the stakeholders of Val d'Ubaye very interested in the subject of project and prompt to contribute. The timing of our activity is also coinciding with several initiatives concerning cultural heritage safeguard, taking place independently in the valley:

- the setup of a specific issue of the emergency plan for the cultural heritage protection and safeguard;
- the implementation of the emergency plan of the most important museum hosted in the valley.

Furthermore, a public inquiry related to the development of an Area for the Development of Architecture and Heritage (AVAP) / Remarkable Heritage Site (SPR) in the municipality of Barcelonnette took place from 08/04/2019 to 05/10/2019. This investigation preceded the approval phase of the AVAP / SPR of the municipality of Barcelonnette by the municipal council, which took into account also the opinion of the Regional Prefect. The public inquiry is the last expression of an old and well-consolidated attention paid to the citizens and to the local cultural heritage from the local authority. This ancient sensibility to the local cultural heritage generated in the 1980 the associations "Sabença de la Valeia" (Knowledge of the Valley), followed by the Castles' Association (Association des fortifications) which evolved nowadays into the Association for the Valorization of the Heritage of the Ubaye Valley (AVPVU).

The implementation of content specifically dedicated to the cultural heritage safeguard within the emergency plan of the municipalities associated to the CCVUSP is supported by its Integrated natural risk management Office (Gestion intégrée des risques naturels – GIRN). Within the framework of a project co-financed over three years by Europe via the FEDER, the PACA region, and other national resources, the GIRN project manager is expected to develop actions for:

- the installation of a global alert system;
- flood and multi-risk detection;
- alert tool for populations taking into account local communities as well as tourists;
- a multirisk inventory of hydrological features on the Ubaye basin and hazard analysis for flood risk assessments on the main tributaries;
- the deployment of an inter-municipal crisis management organization which enables and coordinates existing municipal systems;
- animation of a proactive, targeted and adapted preventive information policy.

The curator of the "Museum of the Valley" (Musée de la Vallée), hosted in the ancient "Villa La Sapinière" at Barcelonnette, is also the coordinator and the responsible for the implementation of its emergency plan, according to the French regulations. The Villa La Sapinière is a cultural asset by itself, as it represents the typical buildings realized by emigrants back from Latin America, and it contains the biggest amount of mobile cultural asset, collections and individual pieces, of the valley. The curator, Hélène Homps, has a main role also in addressing initiatives for the promotion of cultural tourism not only in Barcelonnette, but all through the valley.

Within the scope of the workshop for the valuation of cultural heritage in the pilot area, the BRGM invited the main actors of the cultural heritage management and the institutions responsible for civil protection initiatives at territorial and cultural site level, other than the experts concerned about the local cultural heritage among the Observers of the project. This

configuration aimed to maximize the interest and power of attendees to the workshop, in order to influence future strategies and tactics regarding cultural heritage protection in the Ubaye Valley, keeping the wider point of view of experts dealing also with other territories, for more general feedbacks.

The final list of attendees resulted in:

- CCVUSP Cultural Heritage delegate;
- GIRN project manager;
- APVU President;
- Curator of Musée de la Vallée, La Sapinière;
- DRAC PACA representative;
- CICRP representative;
- Blue Shieds (Boucliers Blue) representative.

CHEERS team at BRGM animated the workshop.

Finally, due to the national strike affecting mainly transportation, the representatives of DRAC and CICRP could not join the workshop and specific interviews were carried out in the days following the workshop, to collect even their feedbacks and suggestions.

4. Designing hazard scenarios

The definition of the hazard scenario of reference is inspired to multi-hazard /multi-risk approach. The evaluation of the cultural heritage asset is assumed independently from a specific hazard, but the selection of the asset to be evaluated takes into consideration if they are exposed to some hazard or not. The damages of an item are assumed to result from the combination of physical “agents” that can be triggered and coexist at the occurrence of a natural disaster. Different natural disasters could trigger finally similar mix of damaging actions.

For example, during an earthquake, an item can be damaged by fall, collision of other objects or debris, water due to pipelines leaks, or fire due to gas leak. A similar mix of actions can be expected when the asset is involved in a landslide. But earthquake and landslides have in general very different source, frequency and intensity, while the exposure of cultural heritage collection and the degradation of its value will depend on the action of specific physical agents and the related susceptibility of the materials constituting the collection. This criterion imply that, in terms of prevention and emergency management, the cultural heritage asset should be prioritized independently from the hazard, but decomposing the impact of each potential hazard in damaging agents effects. Then, the priority of preventive or response interventions can consider the original and the residual “value” of a certain asset, if it suffers the effects of actions that are potentially triggered by different hazard, assuming a macro-scale of intensities for each considered physical agent.

The recurrent risks in the area depends on:

- Earthquakes;
- earthflows and rock-falls;
- extreme rainfalls, triggering flash-floods, mud-flows and debris flows;
- intensive snowfall and consequent avalanches;
- wildfires.

During the introduction of this workshop, the hazard scenario concept has been explained in terms of “hazard pie” (fig. 2), following the criteria adopted by IRSTEA for the vulnerability analysis at the scale of the valley. Each item composing the cultural heritage asset in the pilot area can be exposed to multiple hazards, with different probability of occurrence.

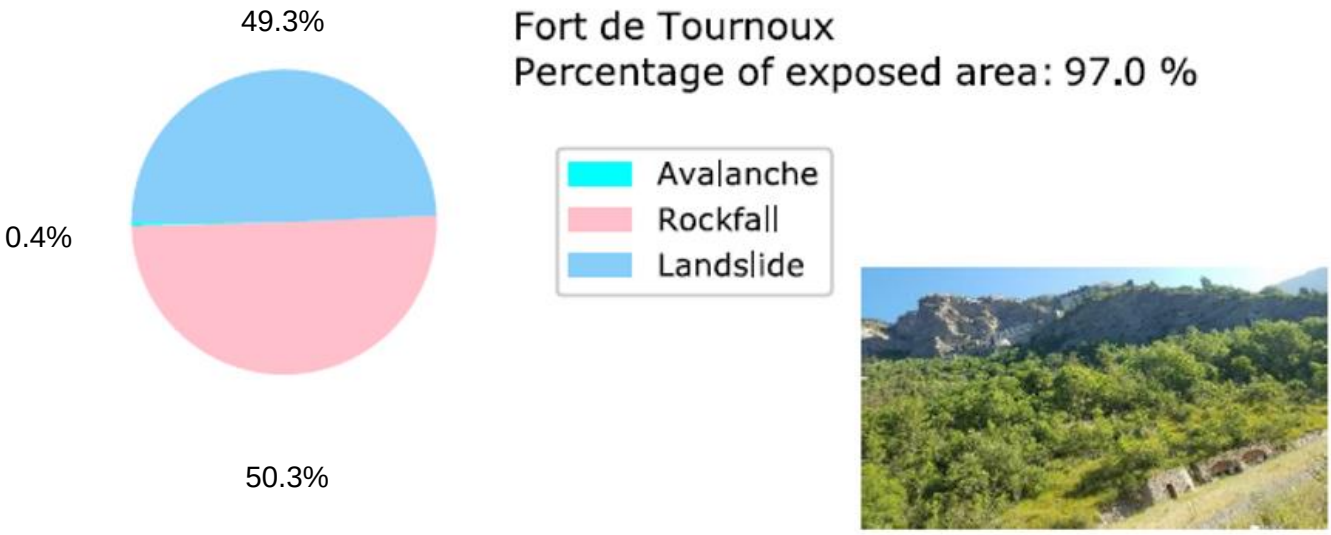

Figure 2: Hazard pie assessed for Fort de Tournoux. The vulnerability assessment can provide information about which sort of hazard threats each element of the cultural heritage asset of the valley, and what are the relative probabilities of occurrence.

But if we consider the physical agents that produce the effective damages to the asset, the uncertainty about probability of occurrence decrease, and becomes more important to assess the potential magnitude of each physical agent, the relevance of time of exposure, and the consequent impacts on the value of the exposed items.

To explain to the attendees how the result of the evaluation is expected to be used, the moderators of the workshop introduced also a diagram showing the decision-making phases that the French team of CHEERS is considering to implement for the cultural heritage safeguard before and during a crisis management (fig. 3). The testing of this methodology will be one of the objectives of the French TTX.

The result of the exercise produced during the workshop becomes the first step for the prioritization of safeguard interventions. It has to be used together with the qualification of the material constituting the asset and the estimation of their susceptibility to the different physical agents of reference. Once that a natural disaster occurs, the prioritization is dynamically produced considering the expected magnitude of each physical agent.

The moderators asked to the attendees to consider, as dangerous scenario, all the potential effects characterizing 4 physical agents:

- heat;
- water;
- potential energy (fall);
- kinetic energy (impact, collision).

The decomposition of the effects of each natural hazard in potential impacts of physical agents helps to:

- build a common background among all the attendees to the workshop, which have different domains of expertise;
- understand and eventually choose preventive measures;
- better address specific safeguard and rescue practices for the emergency response.

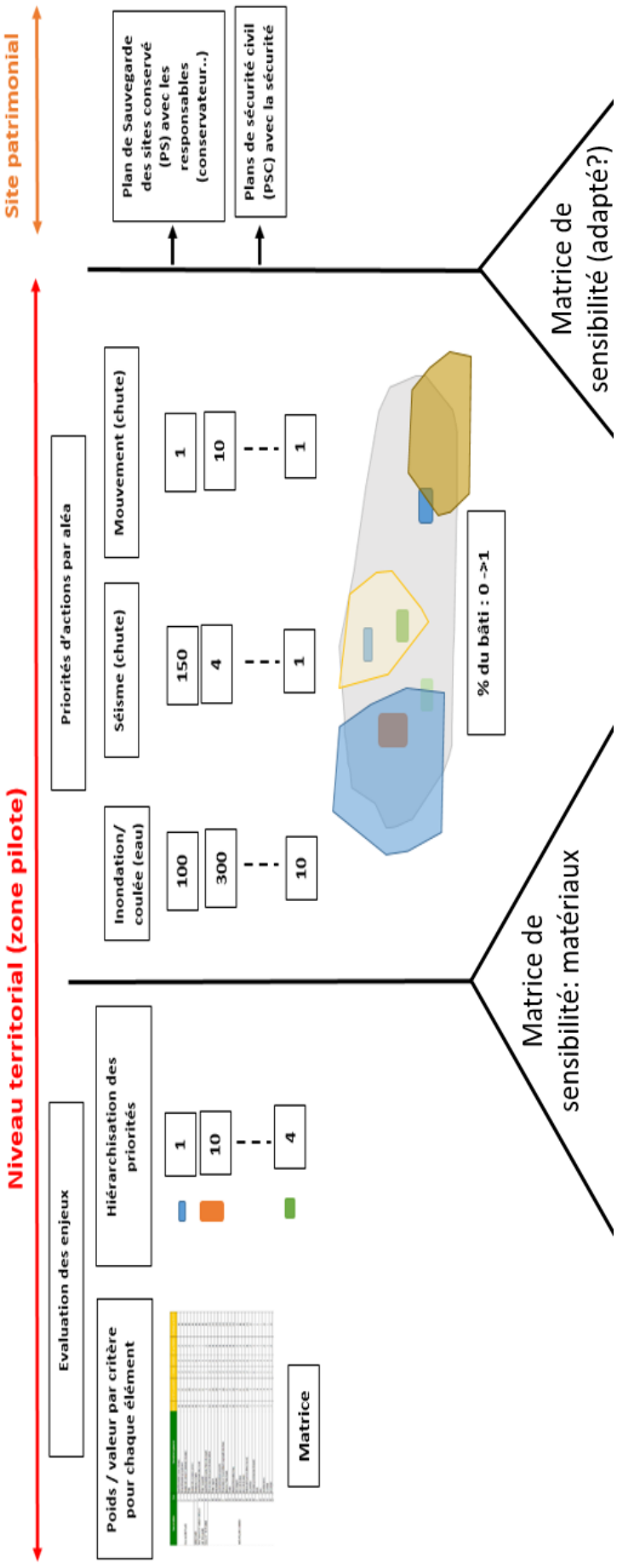

Figure 3: Diagram showing the relationship and the usage of the ordered list of valued CH items, within the workflow of prevention and emergency response prioritization. The prioritization according to the specific susceptibility of the items is repeated at territorial and site-specific scale.

5. Cultural heritage being evaluated

The objective of the valuation workshop in the French pilot area was to make clear to the stakeholders how the method has to be implemented, what are the relevant milestones of this workflow, what is its robustness and the quality, or acceptability, of the results, considering the cultural heritage expertise.

The selection of the cultural heritage to evaluate during the workshop results from the extraction “a priori” of items included in 3 different lists that have been requested to different stakeholders (including project partners and observers). The common criteria for all the requests was to list elements of the cultural heritage in the pilot area that was exposed to natural hazards, with or without evidence of past damages.

These requests produced (fig. 4):

- 47 elements suggested by the CCVUSP and the GIRN;
- 91 elements by the IRSTEA;
- 32 elements suggested by a cultural heritage safeguard expert associated to French Blue Shields and with partial knowledge about the heritage in the valley (but informed enough to know the most famous one).

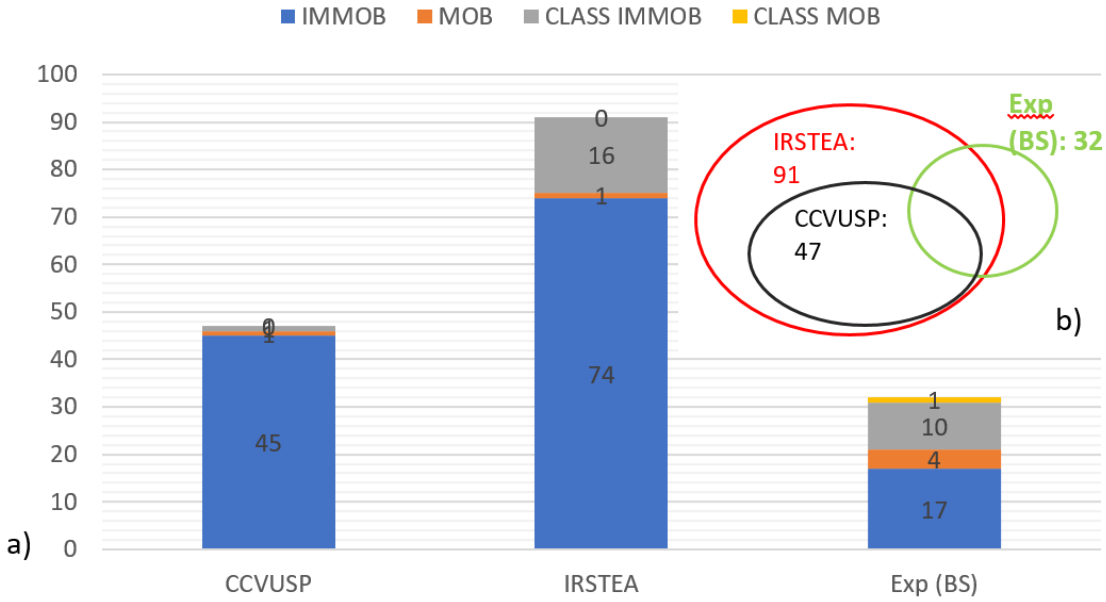

Figure 4: a) Composition of elements categories listed by the different contributors (MOB: mobile asset; IMMOB: immobile asset; CLASS IMMOB: protected immobile asset, CLASS MOB: protected mobile asset) and b) proportions and relationships among the content of the 3 lists.

There were repeated elements among the lists, so the aggregation of the 3 subsampling amounted to a total of 106 elements. The moderators pre-selected about one third of this collection, according to criteria of recurrence, cultural heritage category, presence in national cultural heritage registers. The attendees received a pre-selection of 32 elements represented by:

- 27 immobile items, 10 of which are protected national cultural heritage;
- 5 mobile items, 1 of which is protected.

They were proportional representing the recurrence of religious, military, vernacular and local cultural heritage in the valley.

It is worthwhile to remind that the first objective of the workshop was the testing of the methodology and the assessment of its acceptability by all the sort of concerned experts. The result of the evaluation was valid mainly to check if the methodology proposed by CHEERS was able to provide an ordering of items according to their overall value, accepted by all the attendees. The pre-selected list was aggregating elements with no particular preference, as it was made by the moderators, with no subjective opinion about the asset in the valley.

Within the scope and the duration of the exercise, to make sure to carry out all the phases of the procedure, show and discuss the results with the attendees, the moderators asked to the attendees to agree on a final selection of items reduced to about 10 pieces.

Finally, the attendees agreed on performing the evaluation on a set of 12 items (i.e. about 10% of the initial list of elements), constituting a representative sampling of all the type of cultural heritage of the Ubaye Valley:

- Ancient Four à chaux at Saint-Paul-sur-Ubaye;
- Ouvrage Maginot de St-Ours haut;
- Fort de Tournoux;
- Église Notre Dame du Mont Carmel à Larche;
- Tour Cardinalis of Barcelonnette;
- Château des Magnans;
- Église Saint Jean-Baptiste (et son enclose) de Fouillouse;
- Église paroissiale Saint-Nicolas de Myre at Jausiers;
- Église paroissiale Saint-Pierre et Saint-Paul at Saint-Paul-sur-Ubaye
- Villa Bleue;
- Cimetière de Faucon;
- Église de Saint-Martin du Désert at Maljasset, Saint-Paul-sur-Ubaye.

All the evaluated items represent immobile asset, even if in the preliminary selection there was also mobile items. At the end of the workshop the moderators proposed to the curator to apply the same methodology to the collections contained within the Musée de la Vallée, to assess its suitability for the mobile asset.

All of these elements are threatened at least by one natural hazard but, as explained before, their value was analysed without to consider at this stage their level of exposure or vulnerability to any specific hazard.

6. The evaluation

Once clarified the context of the workshop, the main objective and the usage of the results, the moderator proposed to the attendees the evaluation activity, composed by 2 steps:

- the relative weighing of each type of criteria selected as reference value from the CHEERS consortium, and inspired by ICOMOS practice;
- scoring each selected element for the different value criteria.

This activity was performed voting on each question by show of hands. The attendees were requested to express the level of agreement (yes/no) to each alternative and the expression of the majority was registered. While it was not registered the individual choice, this system is equivalent to the highest frequency criterion for aggregating different opinions. Moreover, it allows also the participation of a wider audience in public events, when web-based solution are not feasible.

6.1. DEFINING THE WEIGHTS

CHEERS consortium selected 7 criteria for the definition of the value of a cultural heritage item, inspired by ICCROM practice (2016). The aim of weighing these criteria is to obtain the “value pie” adapted to the cultural background of the valley and its heritage. The attendees had several exchanges during their evaluation, mainly at the beginning, when they unsuccessfully tried to agree on a scale of importance of the criteria considering all of them at the same time. Finally, the weighing was carried out by using the approach proposed by the CHEERS WP1 leader, the Analytical Hierarchy Process (AHP) implemented by the support of an on-line tool (available here https://bpmsg.com/ahp/).

The participant defined the relative importance of 21 pair-wise comparisons between two individual types of criteria, using the standard Saaty 1 to 9 scale, resulting in the following order:

- Historic 31%
- Evidential 20%
- Aesthetic/artistic 19%
- Communal 12%
- In-use/fruition 9%
- Scientific/educational 7%
- Economic 2%

Even if during the initial discussion they were considering historical criterion very close to the evidential one, they agreed with the weights resulted by the AHP as they recognised that the evidences of the valley identity were shaped during several phases of its history. In fact, the list of items to be evaluated includes elements from the XIII to the half of XX century. They also argued the very low importance attributed to the economic criteria, as consequence of their limited expertise in this domain.

6.2. SCORING THE VALUES

Each selected cultural heritage element has been evaluated with respect to each criterion of the value pie weighted for the Ubaye Valley, by a scale of 7 levels of importance, and the scores have been weighted according to the percentages resulting above. The evaluation activity carried out by the attendees of Barcelonnette workshop resulted in the following ranking and value indexes:

- Fort de Tournoux 139,6
- Église paroissiale Saint-Nicolas de Myre 100,9
- Église Saint-Jean-Baptiste et son enclos de Fouillouse 90,5
- Cimetière de Faucon 66,8
- Villa Bleue 63,2
- Église paroissiale Saint-Pierre et Saint-Paul 58,6
- Église de Saint-Martin du désert 58,6
- Ouvrage Maginot de St-Ours haut 48,0
- Château des Magnans 32,1
- Four à Chaux 28,5
- Tour Cardinalis 19,7
- Église Notre-Dame-du-Mont-Carmel 10,5

Even if the selection is incomplete with respect other remarkable items of the cultural heritage asset of the valley, the attendees recognised that the methodology allows to get a ranking of values that correspond to the importance of the different types of cultural heritage. Analysing the results by cultural heritage expertise, the attendees agreed also on the significance of the distances of the values attributed to the different elements. The first 6 elements are protected cultural heritage sites. The 2 other protected items of the list are actually a more recent church and the municipal tower. The discussion followed understanding the consequence of these distances when this list is used within the workflow for the prioritization of prevention and emergency response actions (fig. 3) and the attendees agreed on its acceptability.

7. Assessing the test outcomes

The general feedback from the attendees about the methodology is positive. They found this approach very interesting for an inclusive assessment of the cultural heritage, considered crucial for a bigger involvement of the population to its safeguard in the valley. They are also impressed by the capability and robustness of the methodology, to detect the relative importance of the different items, even if the voting gave them the impression of a “too simplistic” activity.

The attendees to the workshop have different specific interests and roles in the management of the cultural heritage of the valley, but all of them found correspondence with their criteria in the results and finally agreed with the output of the exercise. Furthermore, the GIRN judged the methodology robust and friendly enough to be replicated at full scale for supporting the development of the first stage of the Cultural Heritage Safeguard and Emergency Plan proposal.

During the final discussion a SWOT analysis was carried out, to register the key remarks of the attendees about their feeling and experience during the evaluation.

7.1. FACTORS OF SWOT

The attendees referred:

- capability to produce wider consensus on critical decisions about asset to protect and to neglect;
- the unsolved difficulty in defining the initial list elements to evaluate, when the methodology is not applied to the entire asset;
- opportunity to share among different actors of the cultural heritage safeguard at territorial scale a prioritization tool that harmonizes the value of a very multi-form cultural heritage asset;
- motivation for a systematic continuous review of the cultural heritage asset in the CCVUSP, aimed to a recursive update of the documents of reference for the cultural heritage safeguard planning;
- the perception of a too limited time for understanding the key concepts about weighing and scoring;
- incomplete panel of experts for getting a more equilibrated value pie, even if the attendees represent different communities of interest of the valley
- the need to involve people with more heterogeneous background;
- risk of misunderstanding about the meaning of value criteria (the components of the value pie);
- risk of misunderstanding about the application of Saaty scale for the weighing of the value pie.

These remarks are reported in the SWOT template as follows:

	SWOT analysis template	
	Positive	Negative
Internal	Strengths	Weaknesses
	- consensus sharing tool - inclusive approach	- preliminary evaluation list - insufficiently heterogeneous panel
External	Opportunities	Threats
	- agreed prioritization system for intervention - continuous safeguard planning - inclusion of people not usually involved in CH safeguard decision-making	- time demand for assimilating the key concepts - mismatch in using score scale - different understanding of keywords (ex. Value criteria definitions)

7.2. IDENTIFYING (MIS-)MATCHES AMONG SWOT ELEMENT AND HIGHLIGHTING STRATEGIES FOR THEIR IMPROVEMENT

The main outcome of the SWOT analysis was the crucial importance adopted for the documentation and in particular for the explanation of keywords regarding the judgement and the evaluation system. The terminology has to be sufficiently generic but at the same time accurate, to be univocally understood by people with expertise in very different domains.

It is recommended to provide this basic information to the participants of the evaluation with sufficient time in advance, and to facilitate the assimilation of the concepts with a session for its explanation and discussion, before to carry out the evaluation activity.

The common well-assimilated glossary within the multi-disciplinary workgroup may trigger the common interest in implementing the dynamics for the continuous update of the Cultural Heritage Safeguard Plan.

8. Conclusions

This collaborative work aimed to define the prioritization of criteria for evaluating the relevance of the cultural asset in the Ubaye Valley and to test it on a selection of elements. Even if the preliminary reaction of the participants to the workshop concerning the methodology was sceptical, they participated with increasing interest.

At the end, they found the results an optimal compromise among their different points of view, dependent from their own background and role in the cultural heritage or risk management and planning.

Even if some critical aspect of the methodology needs still some refinement, the SWOT analysis performed by the participants at the end of the workshop shows a clear acceptance of the proposed methods and a very good agreement about the priority list that it is produced by its preliminary implementation in the Ubaye Valley.

9. References

Bensoussan BE, Fleisher CS (2012) -. Analysis without paralysis: 12 tools to make better strategic decisions. FT Press.

ICCROM (2016) -. A Guide to Risk Management of Cultural Heritage

Appendix 1 (provided to french stakeholders)

Schéma conceptuel de l'Outil de valorisation du patrimoine culturel alpin (vAluaTion Tool for Alpine Cultural Heritage - ATTACH)

Le concept d'outil d'évaluation proposé (ci-après ATTACH) dans la méthode ABC (Michalski S, Pedersoli JL. 2016. The ABC Method: a risk management approach to the preservation of cultural heritage. Ottawa, Canada: Canadian Conservation Institute), qui propose cinq phases dans le cadre de gestion des risques:

1. établir le contexte
2. identifier les risques
3. analyser les risques
4. évaluer les risques
5. traiter les risques.

Le premier comprend également l'évaluation des valeurs («construction de la tarte de la valeur») du patrimoine culturel, qui est une information clé dont le risque est défini comme une «perte de valeur attendue du patrimoine par unité de temps». Nous ne l'adoptons pas complètement pour le projet CHEERS, cependant. Nous avons ajusté cette approche en introduisant trois nouveaux aspects.

Premièrement, nous avons défini un ensemble plus large de types de valeur, qui, à notre avis, reflète une évaluation plus complète et fournit un contexte plus large qui peut être appliqué dans différents contextes. En se référant à ce dernier point, il permet de combiner la valorisation au sein de CHEERS avec des approches de valorisation déjà établies dans différents pays alpins, qui englobent un système de valeurs défini et spécifique au niveau national.

Le deuxième aspect novateur est que les poids relatifs pour différents types de valeurs doivent être définis par une approche d'analyse analytique (par exemple, AHP). C'est une approche qui permet une grande cohérence dans la pondération.

Enfin, notre approche est très inclusive (participative) car elle permet d'impliquer un large éventail de parties prenantes, pas seulement les professionnels du patrimoine culturel. C'est l'une des prémisses du projet CHEERS et des ateliers spécifiques sont organisés dans des zones pilotes où des tâches de pondération / évaluation sont effectuées.

En introduisant tous les nouveaux éléments, nous avons défini le protocole de mise en œuvre ATTACH.

Résumé de la mise en œuvre de ATTACH

Premièrement, nous devons sélectionner les atouts du patrimoine culturel que nous souhaitons évaluer. Cette sélection se fera dans une étendue spatiale et la méthodologie fournit les différentes définitions spatiales (voir figure 1):

- une « **region »** peut consister en une ou plusieurs zones (pas nécessairement adjacentes). Ce n'est pas inclus dans la portée du projet;
- une « **area »** zone correspond à une étendue particulière d'espace ou de surface de sites répartis géographiquement (pas nécessairement adjacents) qui appartiennent à la même unité directrice (par exemple, une municipalité);
- un "**site"** est une localisation spatiale d'un ou plusieurs actifs qui pourraient, sans nécessairement constituer un groupe, en fonction d'attributs communs ;
- un cultural "**asset"** culturel est un objet tangible du patrimoine culturel, qu'il soit mobile ou immobile (par exemple, un tableau, une statue, un bâtiment).

Ensuite, l'actif peut être divisé en groupes (bâtiments, sites archéologiques, collections, etc.) et, en outre, en sous-groupes de valeurs, qui contiennent des éléments individuels de valeurs égales ou proches d'égales. Il s'agit d'une étape clé pour définir le cadre de valorisation en termes d'objets évalués.

Fig. 1: Limites spatiales dans l'approche ATTACH. Voir le texte ci-dessus pour leur description

Comme toutes les valeurs contributives étaient jusqu'ici définies pour créer un périmètre de valorisation commun, l'étape suivante consiste à attribuer des pondérations relatives à ces types de valeurs. Le processus de pondération doit être collaboratif, en rassemblant éventuellement des acteurs pertinents des domaines de la gestion du patrimoine culturel et de la protection contre les risques naturels.

La troisième étape consiste à définir une échelle quantitative à laquelle nous attribuons une valeur. Plus le niveau de valeur spécifique du sous-groupe de valeurs (ou de chaque élément) est élevé.

Parfois, les résultats peuvent ne pas correspondre au véritable état du bien du patrimoine culturel.

Appendix 2 (provided to french stakeholders)

Note technique sur la mise en œuvre d'ATTACH

Le texte suivant présente un protocole général sur la manière de mettre en œuvre et de déployer l'outil ATTACH lors d'ateliers CHEERS. Le protocole est conçu sur la base des hypothèses identifiées dans le schéma conceptuel de l'Annexe 1 et est organisé en une série d'étapes.

Le zone (area) pilot

La première étape consiste à fournir des informations de profil de zone pilote. Ces données aideront les organisateurs de l'atelier, les parties prenantes participant à l'atelier et les partenaires du projet à discuter des résultats à orienter clairement leurs mentalités dans le contexte de la zone pilote.

Les scénarios de danger

Cette étape est très spécifique à chaque cas et dépendra de la configuration de la zone pilote, des types de risques naturels et des biens du patrimoine culturel évalués. Il est également lié aux données disponibles et à l'approche analytique.

Les scénarios de danger combinent généralement des informations sur l'étendue et l'intensité possibles de l'événement de danger naturel et les associent à la probabilité de l'événement.

Identification des biens du patrimoine culturel en cours d'évaluation

Une liste des actifs en risque doit être fournie à l'étape n °. 3

Pondération des types de valeur

L'ensemble de valeurs convenu dans le groupe de travail CHEERS comprend sept types:

- valeur identitaire;
- valeur historique;
- valeur artistique;
- valeur symbolique, spirituel, religieux;
- valeur économique;
- valeur d'usage;
- valeur scientifique / pédagogique.

Les poids relatifs doivent être affectés à chacun des types de valeur. Un processus de hiérarchie analytique (AHP) a été décidé comme étant la meilleure approche: l'importance relative des types de valeurs peut être exprimée et l'AHP permet d'agréger ces informations au niveau du groupe de manière cohérente et complète.

L'ensemble de pondérations doit être identique pour tous les actifs / objets d'une même zone pilote et ne diffère pas entre les différents types d'actifs du patrimoine culturel.

Évaluation du bien

La dernière étape consiste à attribuer une note à chaque type de valeur pour chaque actif (ou élément d'un actif) à évaluer. L'échelle que nous proposons pour le scoring est une échelle géométrique à sept scores (points), ce qui est tout à fait indiqué pour accepter des valeurs très élevées en maintenant le rapport entre les points voisins égaux sur l'échelle complète. Ceci est également bénéfique pour l'évaluation, lorsque certains actifs / éléments ont des valeurs extrêmement élevées. Chaque actif / élément doit être attribué à un score pour chaque type de valeur.

Définition du score
L'article **ne possède pas** la valeur contributive
L'occurrence de cette valeur contributive dans les articles est **très petite**
La présence de cette valeur contributive dans les articles est **petite**
L'occurrence de cette valeur contributive dans les articles est **moyenne**
L'occurrence de cette valeur contributive dans les articles est **importante**
L'occurrence de cette valeur contributive dans les articles est **très importante**
La présence de cette valeur contributive dans les articles est **exceptionnelle**. Ce score indique l'intensité maximale d'occurrence de cette fonctionnalité dans toutes les composantes de l'actif patrimonial.

Scientific and Technical Centre
Risk and Prevention Division
3, avenue Claude-Guillemin - BP 36009
45060 Orléans Cedex 2 – France – Tel.: +33 (0)2 38 64 34 34
www.brgm.eu