

- Summer University CPP 2018
 Melk Monastery, Austria, August 31, 2018
- Final Presentation Summer University Cultural Property Protection 2018
- Anna Kaiser

GUARDING HERITAGE FROM NATURAL HAZARDS







Climate change and other natural hazards pose a risk for cultural heritage assets and the people around them. ProteCHt2save is a project that works to protect the heritage and nearby populations - especially against the risk of floods. ProteCHt2save produces tools to help local officials manage risks and develop action plans for emergencies.

www.interreg-central.eu/culture





AUSTRIA Niederösterreich
CROATIA Jadranska Hrvatska

CZECH REPUBLIC Praha

HUNGARY Dél-Dunántúl ITALY Emilia-Romagna

POLAND Śląskie

SLOVENIA Vzhodna Slovenija



ERDF FUNDING

1.79 MILLION €

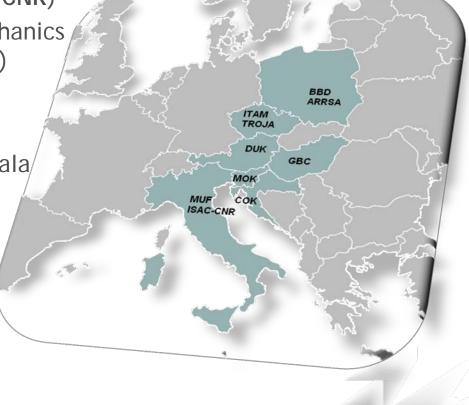
RISK ASSESSMENT AND SUSTAINABLE PROTECTION OF CULTURAL HERITAGE IN CHANGING ENVIRONMENT



1. Institute of Atmospheric Sciences and Climate National Research Council of Italy (ISAC-CNR)

 Institute of Theoretical and Applied Mechanics of the Czech Academy of Sciences (ITAM)

- 3. Danube University Krems (DUK)
- 4. Bielsko-Biala District (BBD)
- Regional Development Agency Bielsko-Biala (ARRSA)
- 6. Municipality of Ferrara (MUF)
- 7. Municipal District Praha-Troja (TROJA)
- 8. Government of Baranya County (GBC)
- 9. City of Kastela (COK)
- 10. Municipality of Kocevje (MOK)







Objectives ProteCHt2save

- Defining risk areas for an improved protection and sustainable use of CH in Central Europe susceptible to disasters and climate change impacts.
- Determining critical elements for CH vulnerability in the resilience and risk management process.
- Setting up of transnational best practices and common strategies for sustainable use and protection of CH to be integrated in joint action plans in a changing environment.

Extreme Events

Flood

Heavy Rain

Drought periods (Fire)

Cultural Heritage Categories

Monumental complexes with related collections located in urban areas



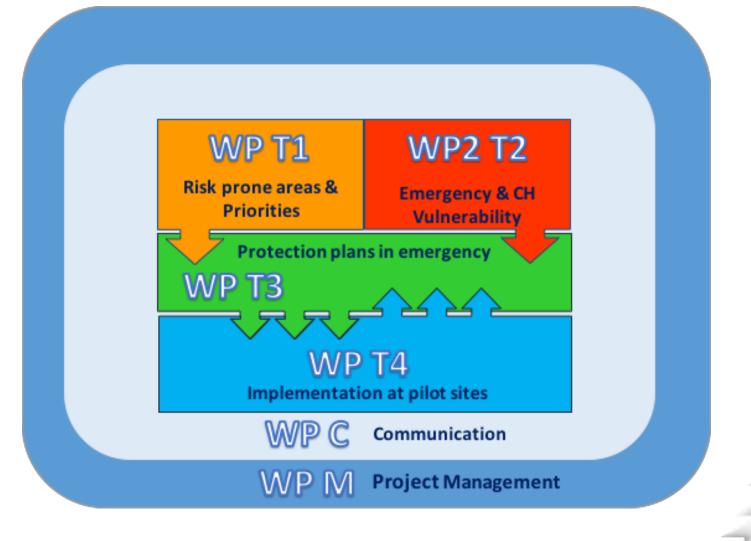


Deliverables ProteCHt2save

- ICT Solutions for risk management and cultural heritage protection in Central Europe
 - Maps
 - Inventories
- Best practice / example tools
 - Decision support tool
 - Best practices manual
 - Handbook on best practices rescue procedures
- Cultural Heritage Rescue Teams
- Transnational, national and local strategies for the protection of cultural heritage











ProteCHt2save







Structure and aims of the Summer University 2018

- Crisis Staff Work
- Scenario KOLOMANI18x-3
- Austrian Army Disaster Relief
- Emergency and Evacuation Plans
- Cultural Heritage Rescue Teams





Crisis Staff Work

- Crisis Staff Work
 - Crisis Staff Work Procedures (Hannes SCHRAMM)
 - Decision Making Process (Hannes SCHRAMM)
 - Fire Brigades Krems (Gerhard URSCHLER)
 - Crisis Coordination Committee Lower Austria (Stefan KREUZER)
 - Coordination of Volunteers Red Cross Team Österreich (Michael SARTORI)
 - Stability Policing (Stefano BERGONZINI)
 - Blue Helmets for Culture Unite4Heritage (Luigi MANCUSO)
 - Cultural Property Protection in the Austrian Armed Forces (Hubert SPECKNER)





Structure and aims of the Summer University 2018

- Crisis Staff Work
- Scenario KOLOMANI18x-3 (Hannes SCHRAMM, Anna KAISER)





Scenario KOLOMANI18x-3

- CPP Experts in Military Crisis Staff Military Command of Lower Austria
- Evacuation and Safeguarding of movable and immovable cultural heritage in Wachau
- Natural Catastrophes
 - Flood in the Wachau higher than 2013
 - More rain predicted
- Security and Safety Issues
 - Radical minorities in Austria aiming at destruction of cultural goods in Austria























Structure and aims of the Summer University 2018

- Crisis Staff Work
- Scenario KOLOMANI18x-3
- Austrian Army Disaster Relief











Structure and aims of the Summer University 2018

- Crisis Staff Work
- Scenario KOLOMANI18x-3
- Austrian Army Disaster Relief
- Emergency and Evacuation Plans
- Cultural Heritage Rescue Teams





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Melk Monastery, Austria, August 31, 2018



Team STEFANO



Syndicate Leader Stefano BERGONZINI Klaus BERNARDI, Armin BRINZING, Karen KOEKENBERG, Alexander MOLITOR, Andreas OBERNOSTERER-RUPPRECHT, Gabriele RAMSAUER, Gerhard SCHEIBER





The evacuation Management Team





Agenda:

- Introduction the Stift Melk
- Kolomani 2018
- Emergency and evacuation plans in general
- Evacuating the Kolomani museum in Melk
- Inventory and Packaging
- Transport, Security and final stocking
- Best practises and Lessons Learnt
- Q&A





- Greetings
- The Evacuation management team
- I'm really the Security Coordinator



Introduction - the Stift Melk





- The Stift Melk was founded around the year 1000
- It is a Benedictine abbey since 1089
- It has the baroque appearance since the 18th century
- It is significant as:
- A Church
- Museum with a collection of artefacts
- Its library holds 100.000+ books including manuscripts
- It is a high school for approximately 1.000 students
- It is the touristic hot-spot in Lower Austria



Introduction - the Stift Melk







KOLOMANI 2018





The comprehensive approach:

Civilian authorities

Military

Police

Fire department

The Stift Melk

Volunteers

. . .



...all necessarily working together to save cultural property!!!

KOLOMANI 2018





Protest Active shooter Blackout

Theft

Hacking into Computer Information System (CIS)

Broken/Lost key

Burst pipe Operator no-show

Rodents Sunray exposure

Access system out of order

Strike

Lightning strike fulmine A/C malfunction

Work accident

Riot

Undisciplined pupils

Blocked password

Suicide

Terrorist Attack Robbery

CCTV failure

Preparation of resources

Emergency and evacuation plans





Fire



www.anna-amalia-bibliothekbuch.de/Bilder-aus-dem-Buch-47-0-



http://www.provincia.bz.it/sicurezza-protezione-civile/protezione-civile/cosa-fare.asp





Risk:

Event harmful to people / things



Fire Biblioteca Sanita' Pubblica 2014



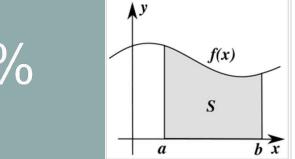
Earthquake Emilia Romagna Public Library 2012



Flood October 2000 Archive University of Torino Centro Piero della Francesca

ella Pieri presentation 30 May 2017 - Foto: Astut (Archivio Scientifico Tecnologico Università di Torino) e Soprintendenza Archivistica e Bibliografica Piemonte e Valle d'Aosta

Probability



2016 [edit]

- 2016 São Paulo flood and mudslide
- April 18 2016 Houston floods
- · 2016 European floods
- 2016 Oklahoma floods^{[26][27]}
- 2016 Maryland flood^{[28][29]}
- 2016 Louisiana floods^{[30][31]}

https://en.wikipedia.org/wiki/List_of_flood





Resilience

The Emergency/Evacuation Plan Warning signs

Skills

Dangers/Threats

Detailed information

Prioritize

Strength

Partners

Inventory

Weakness

Flow lines Opportunity

Recognize and understand

Threat

Un-/Expected scenarios

Coordination

Joint planning

Expertise

Exercises

Vulnerability

Personnel

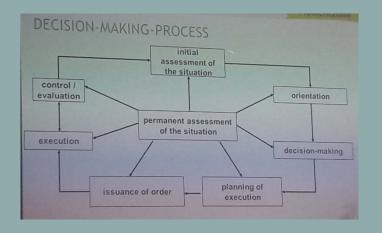
Preparation of resources

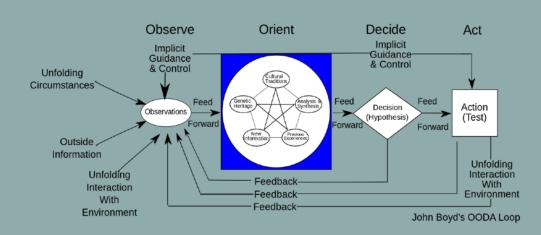
Availability





The decision making process and structured planning system to develop viable solutions.

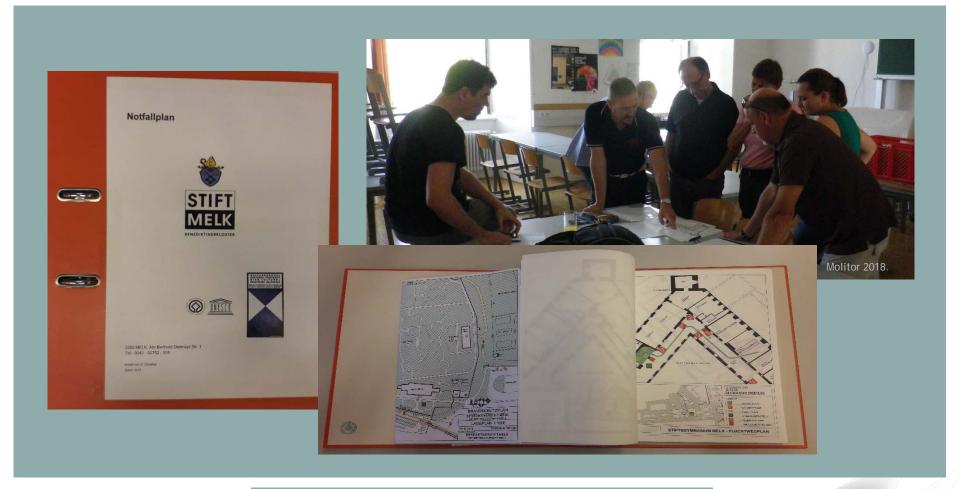












Evacuating the Kolomani museum in Melk





- Inventory number and sheet
- Description of the object
- Picture
- Priority
- Special treatment (HAZMAT)
- Exact location
- Personnel needed



Molior 2018







Legal obligation when packing cultural property:

EN 15946 conservation of cultural property - packing principles for transport

EN 16648 conservation of cultural heritage - transport methods





Emergency box

- Suitable Packaging material
- Hazardous objects











Supervision by experts

- Books
- Valuables
- Coins
- Chalices
- Furniture
- Paintings

Documentation















Importance of documentation from packaging to the storage

Development of transportation requirements

Handover procedures (always 2 persons ...)



Exercise Kolomani 2018
List of evacuated objects

Checkpoint: Packaging (complete list in numerical order)

Inv. no.	packer 1	packer 2	Time	Handed over to	notes
001					
002					
003					
004					



Transport, Security final stocking





X-check at museum exit (goods and personnel)



Exercise Kolomani 2018 – List of evacuated objects

STIFT

Checkpoint: Exit Museum

Time out	Time in	Inv. no.	Handed over to	Notes







Handover to Austrian Armed Forces Transport











Handover at final storage area at Austrian Armed Forces' barracks X-check at the end with the original packing list



STIFT	Exercise Kolomani 2018 – List of evacuated objects STIFT MELK Checkpoint: Storage at barracks						
Time	Inv. no.	Handed over to	Notes				





- Location
- Agreement
- Security conditions
- Inventory check
- Communication





Molitor 2018





Best Practises and Lessons Learned:

- People are key communication and cooperation
- Information readily available



Best practises and Lessons Learnt





Best Practises and Lessons Learned:

- Force Protection is priority
- Expertise and Flexibility





Best practises and Lessons Learnt





Thank you very much for

your attention



A&Q





- Summer University CPP 2018
 Melk Monastery, Austria, August 31, 2018
- Cultural Heritage Rescue Teams 1
 - Team CRISTINA
 Syndicate Leader: 0

Syndicate Leader: Cristina COLLETTINI Armin BLITZ, Ilse ENTLESBERGER, Kimberly HIMMER, Barbara INTERLANDI, Olivier MELCHIOR, Sonja MÜHLBACHLER

INTRODUCTION



- Recommendation and Mission Statement
- Purpose
- Structure
- Equipment
- Training CHRT Course
- Mission preparation



RECOMMENDATION



Establish an international NGO to provide team personnel, equipment and the necessary financing of CHRT operations. It is modelled on rapid response teams such as Doctors without Borders (MSF).





MISSION STATEMENT



CHRT offers a rapid response for the protection of cultural heritage facing environmental disasters and the consequential effects. CHRT is part of an international NGO created specifically with cultural heritage experts with specialist competences to identify, prioritize and safeguard the integrity of tangible heritage. It engages with various stakeholders (to include local governments).







PURPOSE



The purpose of a Cultural Heritage Rescue Team (CHRT) is to secure the safety of immovable and movable heritage in crisis situation.

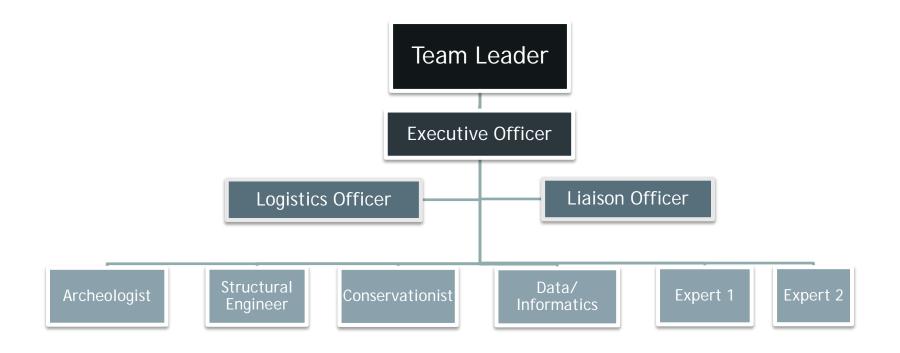




ORGANIZATIONAL STRUCTURE



The CHRT consists of generalists and specialists deployed subject to the needs identified by the stakeholders.





ORGANISATION OF TEAM, STRUCTURE AND EQUIPMENT



- Equipment is provided by the NGO.

 Storage and responsibility Recommendation that the "kit" is held by in each region, close to major airport and at least two main roads.
- Additional equipment may also be requested from local/national governments by liaison officer/logistics officer.
- Material is organised on the basis of type such that it is readily identifiable.
- The logistics officer provides the necessary protective material subject to the items.



SECURITY EQUIPMENT REQUIRED



- Boots with steel toe and steel shank
- Helmet with integrated light
- Gloves
- Eye protection
- Ear protection
- Face mask
- Waterproof jacket
- Harness
- Identifiable vest with team name and reflective properties







TEAM EQUIPMENT



Communication

- SATCOM
- Walki Talki provided by host
- Smartphone (with dedicated App)
- Basic office materials
- Maps and plans (on request)
- Tablets

Technical

- Boxes and storage equipment
- Packaging and protection systems
- Basic handtools
- Vehicle
- Lights
- Restoration equipment
- Cameras
- Generator



TRAINING



CHRT basic course

Training should be off-site and on-site (practical)

Decision Making process - how to set up mobile unit, how to execute, how to move

- How to ensure safety of CPP experts
- Health and safety how to move objects without injury to CPP experts
- How to secure material heritage
- Contaminations and control
- How to use equipment
- Team structure and protocol
- Team leader, Executive/Logistics/Liaison Officer training
- Stakeholder interests
- Practical exercise before deployment to include informatics and standard operating procedures
- Evaluation: stress and anxiety management





ORGANISATION OF COURSE



Basic Training

- Course to be available in multiple countries
- Course is online and consists of 10 Modules

Implementation

Accredited institutions - designated university (private-public partner), designated governmental agencies



MISSION PREPARATION



Foundation/NGO established with dedicated employees and back office.

Event occurs...

<i>0 hrs</i> Foundation	received request.
-------------------------	-------------------

24 hrs Foundation responds to request. DMP of

Foundation begins. MoA implemented.

48 hrs Liaison officer familiarises himself/herself

with the situation on the ground.

48 hrs HQ appoints national team leader (if

possible). Team is established 48 hours.

56-72hrs Team despatched and kit despatched.

Travel Mission begins.







REPORTING STRUCTURE



- The Team Lead is in charge of reporting to back office and represents the team.
- S/he is responsible for communication and actions.
- S/he can utilise the liaison officer for official communication and can delegate as necessary.
- Internal reporting: the various CPP members report to the Team Lead.



A calamitous event is, by its nature, destructive.

It is everyone's duty to spend all the energies necessary to guarantee cultural heritage safeguarding and securing, not only because of historical and artistic value cultural heritage has but because it is representative of our historical identity.

Thank you for your attention!



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Cultural Heritage Rescue Teams 2

Team PAUL

Syndicate Leader: Paul FOX Florian DIETRICH, Tim PURBRICK, Altagracia PYTEL, Alessia STROZZI, Trifon TRIFONOV, Nur UMAR

CULTURAL HERITAGE RESCUE TEAM



Purpose Tim & Trifon Structure
Tim & Trifon

Equipment
Nur & Florian

Training
Nur & Florian

Mission preparation Alessia & Gracia







Purpose

What's the Task (Mission) of a Cultural Heritage Rescue Team (CHRT)?

Deliver First Aid to cultural heritage in times of crisis







Purpose

Which Capabilities and Capacity should a CHRT display?

Capabilities = Skill Sets, Competences

Capacity = Resources (how many tasks can be done)

Enabling Capabilities	Operational Capabilities
Security	Situation assessment
Management	CH assessment
Coordination	Decision making
Documentation	Action plan
Logistics	
Decide plan and lead	





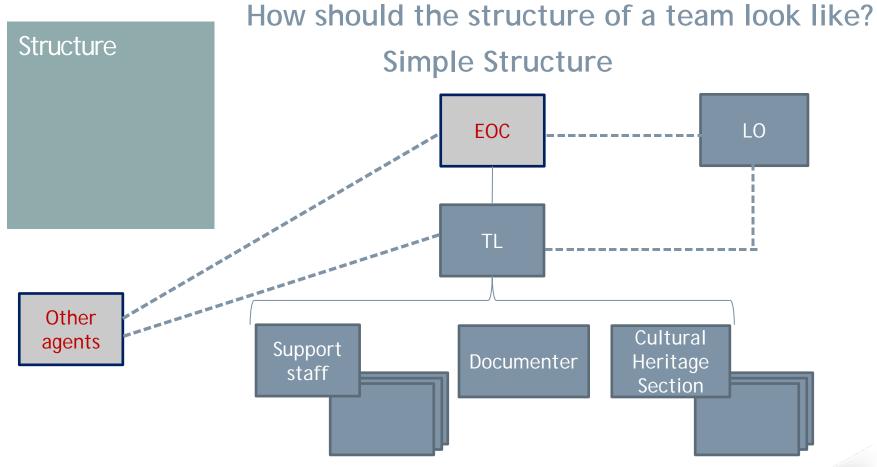
Structure

Which functions should be displayed in CHRT? Assumptions

- Simple emergency
- Safe environment
- Logistic support provided
- Legal permission given by authority

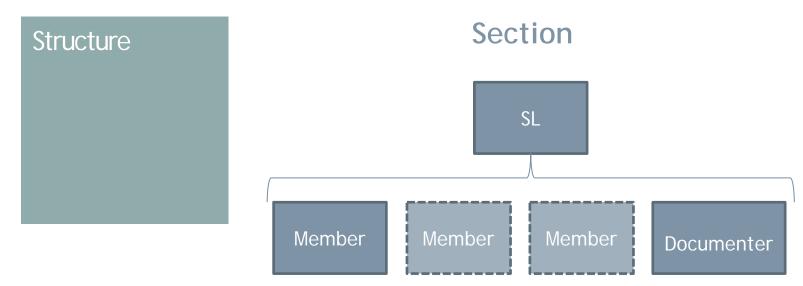












- Documenting
- Handling
- Packing
- Moving
- Storing





What should be included in personal security equipment?

- ID Card
- Head Torch | Torch
- First Aid Kit
- Helmet
- Face Mask | Eye Protection
- Hi-vis Clothing
- Gloves
- Boots
- Communication Equipment
- Knife | Pliers
- Whistle
- Rescue Beacon
- Blue Force Tracker





What kind of equipment should we provide for the team?

- Carry bag | Backpacks | other
- Ruggedized Laptops | International Plugs
- Cameras | Headcam | SLR
- Marker Kits
- Ropes
- Packing Materials | Carry boxes | Labels
- Notebooks | Pens etc. (documentation)
- Red light
- Tool-Kits
- Communication
 Pers. Comms | Sat Phones | Radio etc.
 Internet Connection Satellite
- Specialist Eqpt Op Dependent not listed





What kind of equipment should we provide to establish an inventory?

- Cameras
- Inventory Emergency Form
- Marker Kits
- Stationary Kit
 - Ruler
 - Colour Chart
- Existing information





How should equipment be organized?

- Personal kit is the responsibility of Team Members
- Team kit has to be within the Headquarters | Base
- Equipment has to be stored in ruggedized boxes





CHRT course content - structure

- Individual
- Team
- Specialist
- Annual refresher new knowledge | skills
- Leadership
- Pre-deployment





CHRT basic course content - activity (individual)

- Health & Safety (Risk | Security)
- First Aid
- Fitness & Medical
- Equipment Training
- Decision Making Process
- CHRT individual skills
 - "Working practices"
 - Documenting | Handling
 - Packing | Moving | Storing





CHRT basic course content - understand (individual)

- Command & Control
- PR Awareness
- Recruiting process
- Logistics
- Legal
- Finance
- Wider activity





CHRT basic course content - activity (team)

- First Aid
- Casualty Extraction
- Team Skills "Working Skills" CHRT
 - Documenting | handling
 - packing | moving | store
- Decision Making Process
 - Assessment
- Health & Security
 - Risk
 - Security

Scenario based training





Training

Testing regime

Standard to be met

Test





Training

Course organization and institutional delivery

Organization

- All options (not virtual)
- Modules/block
- Beer drinking (Team building)

Institutional delivery Collaboration by:

- Museum | CH Institutions
- University
- UNESCO, ICCROM
- ICORP, ICOMOS, ICOM, IFLA





Training

Which institutions can conduct and validate standardized training?

- Basic course
- Annual Refresher Training
- Specialist Continuation Training

Institutional delivery Collaboration by:

- Museum | CH Institutions
- University
- UNESCO, ICCROM
- ICORP, ICOMOS, ICOM, IFLA





Mission Preparation

- 1. Receive Tasking
- 2. Deploy Liaison Officer → EOC
- 3. Open Source Media Search
- 4. Call Out Team
- 5. Briefings
 - Theatre / Site specific
 - Cultural / Security
- 5. Prepare Equipment
- 5. Require Specialist Equipment
- 5. Arrange Transport to Site





National or international teams? *Crisis dependent*

NATIONAL

- Defined standard
- Team training

INTERNATIONAL

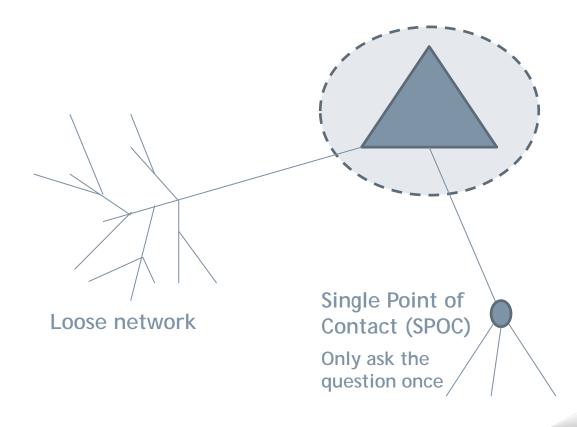
- Best qualified
- Most experienced
- Different training standards
- No team training
- Language
- EQPT standard







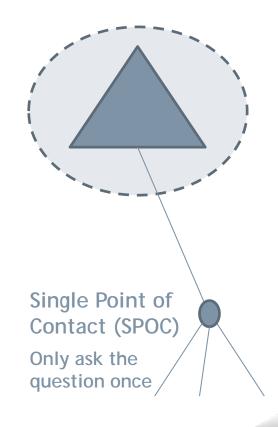
Organization of Reach-back















Home base operation centre

Support the team

Real life support

- Persons
- Equipment
- Logistics
- Financial
- Operational situation

Knowledge

- Professional opinion
- Research & publication
- Practical skills





Characteristics of a home base operation centre

- Communications
- Rooms | Space
- Professionally qualified and experienced staff (several)
- Professional network access
- Funded
- 24/7/365 during OP?

Who provides?

- CHRT Organization
- Academics
- CH Institutions
- NGOs
- 10
- State organization





How to organize a reporting system?

Situation report

CH First Aid Report

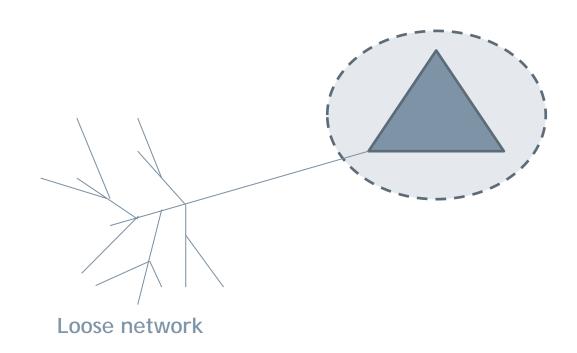
- Date
- Team
- ID
- Persons
- Equipment
- Logistics
- Financial
- Mission status
- Next action
- Location

- Date
- Team
- ID
- Location
- CH Activity
 - Last 24h
 - Next 24h



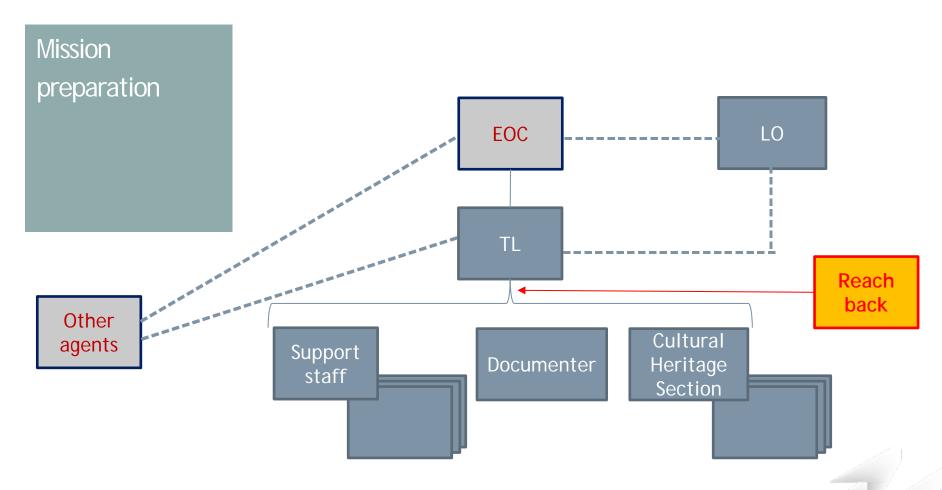
















Thank you very much for your attention!



Absent on operations: Alessia





- Summer University CPP 2018
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- EU Report Safeguarding Cultural Heritage from Natural and Man-Made Disasters
- 2

Paul Fox





Safeguarding Cultural Heritage from Natural and Man-Made Disasters

A comparative analysis of risk management in the EU



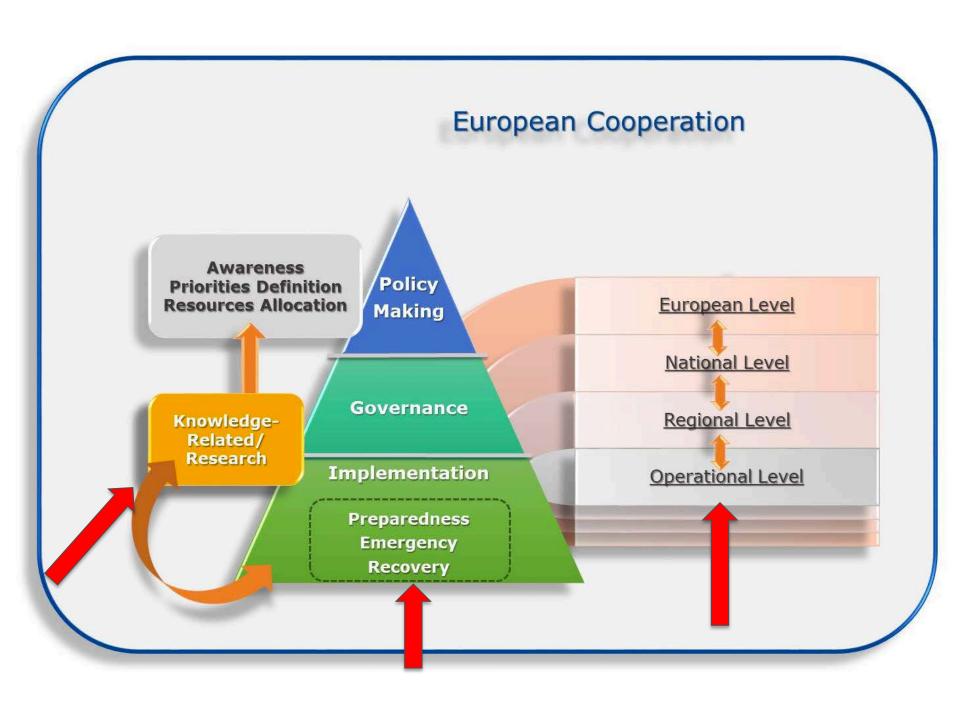


Key Lessons learnt during the Study

The integration of cultural heritage into national disaster and risk reduction strategies ... still suffers from:

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







General recommendations

Priority 2 - Strengthening disaster risk governance to manage disaster risk Promote collaboration of competent authorities

Foster collaboration by each country's competent authority (e.g. Ministry of Culture, Civil Protection, Police, Fire Dept.) for planning preparedness, emergency reaction and recovery and encourage coordinated actions among EU member states.

Support structural documentation

Support the documentation...built heritage.... This will facilitate operational procedures and ensure more easy and timely access to the required information. Preferably, such activities should be carried out in advance of any disaster incident occurring.





General recommendations

Priority 3 Investing in disaster risk reduction for resilience Establishment of priorities for protecting cultural heritage asset

Define priorities of cultural heritage assets to be rescued and make this information readily available to the relevant authorities.





General recommendations

Draft European Standards

European Standards for safeguarding specific categories of cultural heritage assets against the effects of different types of disaster should be drafted.

[...]

Support and enhance research

- Develop early warning and damage modelling systems.
- Develop locational maps of European cultural heritage at risk that link with...potential risks.
- Create measure-oriented database information on the criticalities of cultural heritage and intervention priorities.
- Create recovery measure preparedness in advance of an incident taking place.





Identified Gaps and Required Activities

Administration and Managerial Implementation

There is a need for:

- Promoting, creating and piloting an effective co-ordinating methodology for all potential disaster related incidents, including those that transcend operational boundaries.
- Training responsible employees on emergency disaster planning and how to respond accordingly.
- Creating and making available electronic archival reference material.
- Setting up informed criteria and techniques for prioritising and securing valuable items and assets in the event of an emergency.





Enhancement of education

In support of Priority 3, the education of all parties interested in ameliorating the potential consequences of disasters affecting the cultural heritage is a primary prerequisite for all categories of risk. Various approaches are available:

Actions to educate specialists

The EU could encourage a greater understanding of the issues by supporting seminars and networks of collaborative postgraduate courses for specialists in different fields. The issue of Cultural Heritage Risk Assessment should not be solely conducted in theoretical terms; a connection between practical knowledge and its pragmatic implementation on the ground has to be achieved.

p.28





Enhancement of education cont.

In support of Priority 3, the education of all parties interested in ameliorating the potential consequences of disasters affecting the cultural heritage is a primary prerequisite for all categories of risk. Various approaches are available:

In-post training for employees

Supporting regular in-post staff training should be considered compulsory, with seminars and practical sessions providing information and understanding, and improving skills on how to deal with emergency situation occurring....

It is also beneficial to ensure that members of the action-taking task forces (e.g. Fire Department, Police, Red Cross etc.) regularly participate in readiness exercises and attend mandatory training seminars. Achieving familiarity of current operating conditions is essential to success.

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Adoption of evacuation and recovery measures by cultural institutions

Concerning Priority 4, initiating and encouraging as many cultural institutions as possible to adopt evacuation and recovery measures for cultural heritage assets in emergency situations by looking at lessons learnt from previous historic incidents of good and bad practice is of great importance.

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It is recommended that National Authorities be reminded that:

There is need to establish or to develop civil-military cooperation.





It is recommended that Regional and local Authorities be reminded that:

- Preparatory measures in civil-military cooperation have to be undertaken on a local and regional level.
- The coordination between civil and military forces should be ensured through coordination centres.
- On-site knowledge and local experience are crucial for the implementation of protection-measures.
- The cooperation of civil and military forces has to be established or improved through joint training exercises at a local level.





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