

WELCOME to RESCULT!

Increasing Resilience of Cultural heritage: a supporting decision tool for the safeguarding of cultural assets.



NEWSLETTER 4/2018

This is the 2nd RESCULT newsletter!

During the last months there has been great progress in achieving ResCult's overall objectives. The first User Forum was held in Venice on November 29th 2017. Decisive steps have been taken towards the realisation of a European Interoperable Database (EID) designed to provide a unique framework for the Protection of Cultural Heritage in case of emergencies. Also, the case study selection has been successfully finalised and an intense data collection started.

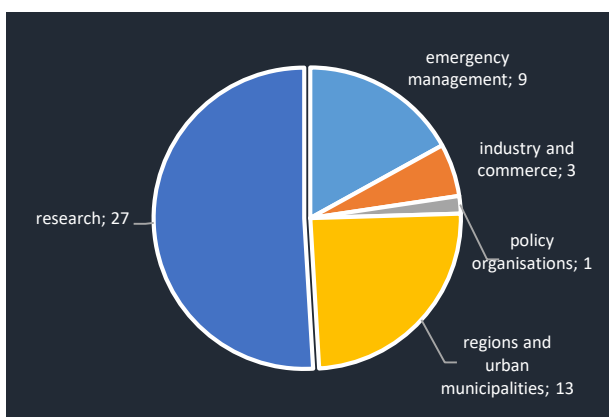
What has been done

First ResCult User Forum

The most important event was the first ResCult User Forum. It took place in Venice on November 29th 2017. The purpose was to discuss the conceptual model of the EID that will be implemented in the ResCult project. Over 50 stakeholders operating in the field of Cultural Heritage Protection and Emergency Management debated about existing standards and requirements.

Opinions, feedbacks and suggestions on how to refine the EID have been collected during the forum by experts from emergency practitioners, representatives of urban municipalities, policy organisations such UNISDR and a number of scholars with diverse disciplinary backgrounds

working in the field of Cultural Heritage. Furthermore, the User Forum has been an opportunity to present the results already achieved by the ResCult project, to extend the project stakeholder network, and to enhance impact and visibility of the project. There have been manifold feedbacks and results. The four most important ones can be summarised as follows:



Composition of user forum participants

1. The general conviction of the participating stakeholders is that the ResCult EID can play a decisive role to better evaluate economic losses to cultural heritage caused by disasters. This aspect particularly addresses both, the monitoring process of the Sendai Framework and the improvement of risk knowledge and decision-making processes. Therefore, this evaluation functionality shall be at the core of the project. Moreover, the EID structure should include the relevant indicators as described in the Sendai Framework.
2. The development plan of the EID must include a strategy for ensuring the collection of data after the project's testing phases conducted in the three ResCult case studies. There is need for creating incentives for local, national, and cultural authorities as well as cultural sites' managers to adopt this particular system.
3. The system must allow for the integration of data from sources other than those that have been part of the project. However, in accordance with this requirement first contacts have meanwhile been established. The ResCult Network of stakeholders has to be expanded in order to reach further using the Flora Software that is well established in Museums and the Joconde Standard. Also, in order to achieve an automated transformation between the Joconde and the ResCult format, a cooperation with Decalog - a software company implementing CH databases in France - was taken up. (see below → [Raising awareness and cooperation](#))
4. Finally, the EID must include data on temporary exhibitions and should be available not only to emergency operators but also to decision-making authorities.

The User Forum's successful outcome was possible due to the broad participation of stakeholders. Among many others, the following entities were represented during the event:

- Italian Civil Protection Department
- E-RIHS
- UNISDR
- CERHER
- Regional Secretariat of MiBACT for Veneto
- Civil Protection Department of Marche Region

We thank all participants for their valuable contributions!

EID conceptualization

The conceptualisation of the EID has been finalised. It answers the following five questions that have been discussed heavily during the User Forum in Venice.

What is the Scope of the EID?

The EID will be able to include movable and immovable, tangible and intangible items of Cultural Heritage.

Who are the users that are targeted?

- **Emergency Operators:** The EID will support emergency operators sharing data on Cultural Heritage including position, type, specific vulnerabilities/needs, but also about the location of buildings which can be used as temporary artwork storage in case of emergencies
- **Authorities and Bodies operating in the field of Cultural Heritage:** The EID will be a showcase of best practices, procedures, technologies, approaches, etc. It will foster the knowledge exchange among different stakeholders and increase the interoperability among European member states, supporting the whole decision-making chain to establish proper strategies for cultural heritage protection and benefit from experiences which have already proved to work.
- **Cultural Heritage public and private owners:** Cultural Heritage owners will be able to benefit from reported best practices (in particular concerning conservation, movement, and storage also including temporary exhibition) as well as to report their collection on an international database, paving the way towards the creation of a standard.
- **Technology/Knowledge providers:** Through the EID technology/knowledge providers will be able to share and diffuse information on the technologies, procedures, approaches which have proven to work for protecting Cultural Heritage.
- **Other stakeholders and actors:** Associations, volunteers, and other stakeholders with the aim to protect Cultural Heritage will be able to benefit from the information contained in the EID. Also, the EID will support the process of raising awareness among people about Cultural Heritage hosted in Europe and damaged by natural hazards, increasing the attention and fostering the recovery of touristic flows after disasters.

What standards does the EID build upon?

The first conceptual model is based upon 3 entities:

Cultural Entities – Buildings – Hazards

The classification, attributes, and relations between those entities were shaped taking into account several international and national standards, in particular:

- UNESCO (Cultural Heritage - International)
- EUROPEANA (Cultural Heritage - International)
- MIBACT – SigecWeb (Cultural Heritage – National, Italy)
- JOCONDE (Cultural Heritage – National, France)
- INSPIRE (Cartographic and Disaster Risk Indicators, both International)
- CITYGML (Cartographic, International)
- SENDAI FRAMEWORK (Disaster Risk Indicators, International)



For the second release, three key elements will be focused on:

- The feedbacks of User Forum participants
- JOCONDE standard: deeper analysis of data transfer options will take place
- The Disaster Risk Indicator contained in the Sendai Framework, in particular the parameters on “disaster loss” which are fundamental to establish the impact of natural disasters on Cultural Heritage.

What will the INTERFACE of the EID look like?

The user will interact with the database via web, after registering its account, accessing a dashboard showing the 6 core functionalities:

- European Cultural Heritage map
- Disaster Information Archive (Cadaster)
- 3D model interface
- Disaster risk monitoring interface
- Advice seeking interface
- Data acquiring platform

What makes the EID so valuable?

The ResCult EID is currently the only data model that embeds the C6 indicators developed by the UNISDR to monitor the implementation of the Sendai framework. Therefore, it is the only format that supports the reporting of all participating governments on their progress in achieving the respective targets of the Sendai Framework. Furthermore, data from external databases will be integrated automatically into the EID. This minimises the effort required to convert and update existing local databases to the new standard and thereby increases the applicability of the ResCult solution by public bodies.

Raising awareness and cooperation

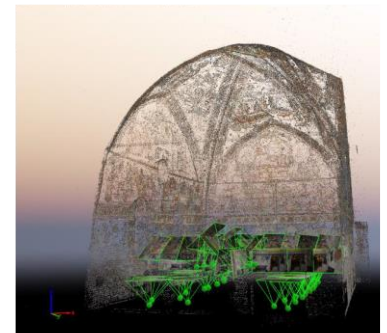
- The ResCult project raises, among others, the interest of local political authorities. A relevant example is the cooperation established between the ResCult Project and the Marche Region. The region refers to the well-known phenomena of earthquakes occurring in the Centre of Italy. It is hoped that the cooperation will produce great impact on the valuable Cultural Heritage located in the area. Moreover, more than 200 stakeholders of different organisations already asked via the ResCult website, and through contacts established during dissemination events, to be included in the ResCult stakeholder network and being informed about the project’s outcomes.
- With Decalog, a commercial software provider in the field of managing artworks data has expressed its interest in the ResCult project’s approach. Independent from the project’s funding, this industrial company will implement an interface module that allows its software to interact with the EID. This is an important step towards promoting the advantages of the ResCult Database and overcoming the compatibility barrier between the EID and different formats used in existing databases.

ResCult on stage

On the **25th of October 2017**, an important COST-Connect event on Cultural Heritage took place in Brussels. Massimo Migliorini - RESCULT project coordinator - participated on direct invitation by EU DG-Connect and chaired a working session on Cultural Heritage Digitalization.

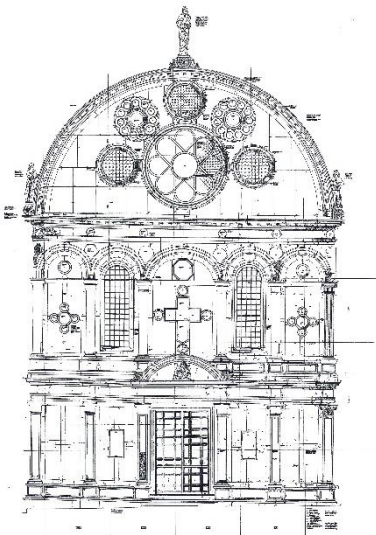
After the First User Forum of the ResCult project in November it was decided to split the Second User Forum into three separate **case study data collection meetings**. These were to be held on site in each of the case study regions in order to collect more input to further refine the conceptual model of the EID.

In the **Marche Region, Italy**, a data collection survey was already conducted in Tolentino and San Severino. The metric survey was done using a broad range of techniques, including GPS/GNSS, LiDAR, ZEB-REVO scanners and numerous forms of photogrammetry.



Close range photogrammetry of San Nicola a Tolentino, Italy

What is next



Upcoming events

In **Venice, Italy**, researchers and practitioners will meet in April in order to collect discuss the data provided by the case study partners on the Santa Maria dei Miracoli Church.

The third case study data collection meeting will take place in the Prehistoric Museum of **Quinson, France**, in July 2018.

Also, ResCult will present its results at the **European Forum for Disaster Risk Reduction** (November 2018, Italy).

Façade of Santa Maria dei Miracoli Church, Venice

Publications

The following article submitted to the Geoinformation for Disaster Management (Gi4DM), 18–21 March 2018, Istanbul, by ResCult project partners POLITO was recently published in the ISPRS Archives: [“A European Interoperable Database \(EID\) to increase Resilience of Cultural Heritage”](#)

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