ACTION PLAN

Digitization of Natural and Cultural Heritage in Harghita County
Table of contents

SUMMARY OF THE ACTION PLAN ........................................................................................................... 3

I. ACTUAL SITUATION OF THE DIGITIZATION OF NATURAL AND CULTURAL HERITAGE IN HARGHITA COUNTY ........................................................................................................... 5

1. General information ......................................................................................................................... 5

2. Policy context .................................................................................................................................... 13

II. SWOT ANALYSES ............................................................................................................................. 15

III. ACTION PLAN .................................................................................................................................... 19

1. Objectives ......................................................................................................................................... 19

IV. DETAILS OF THE ACTIONS ENVISAGED ......................................................................................... 21

ACTION 1 – Unified local values register ............................................................................................. 21

ACTION 2 – Harghita County Digitizing Center of cultural and natural values ..................................... 25

ACTION 3 – 3D Built Heritage – restoration and presentation ................................................................. 28

ACTION 4 – Digitization of historical sites - cemeteries ....................................................................... 31

ACTION 5 – Touristic application of Harghita County ......................................................................... 34

ACTION 6 – Digitization of natural attractions and touristic trails ....................................................... 38

ACTION 7 – Virtual Gallery of Art – Digitization of the collection of the Cultural and Art Center of Lăzărea ........................................................................................................................................... 42

ACTION 8 – Living Contemporary Gallery in Harghita County .......................................................... 46

ACTION 9 – Digitization of literary sights, location-based stories as intangible values in Harghita county ........................................................................................................................................... 49

ACTION 10 – Digitization of Libraries and archives in Harghita ......................................................... 53

ACTION 11 – Digitization of village museums ...................................................................................... 56
Summary of the Action Plan

The general objective of the Digitization Action plan in Harghita is to create a supporting and inspiring environment for the local organizations to plan and implement coordinated, profound and accurate digitization actions in the field of cultural and natural heritage.

Most important objectives of the action plan in Harghita county are:

- Establish concept of coordinated digitization actions based on experiences and lessons learnt in the CD-ETA project

- Provide measures and guidance for new projects, related with preservation and promotion of the natural and cultural heritage.

- Summarize existing valuable initiations and provide a common guidance to the continuation of good practices.

- Elaborate a standardized frame of rules, actions, institutions and tools to the digitization of cultural and natural values which can serve as a benchmark for the improvement of the related policy instrument of the region/country

- Promote coordinated digitization actions in the county, awareness raising among stakeholder organizations

- Establish common point of view for heritage conservation and digitization: communication network in the county. Connect existing initiations sharing access to existing databases.

With implementation of the Action Plan Harghita County Council aims to draw up proposals to amend the policy instrument, with the active involvement of the stakeholders, especially with the support of the Agency for Development of Center Region. The improvement of this policy instrument will be possible through providing measures and good practices to follow which can be implemented in the entire Region.

The elaboration of the Action Plan in the frame of the CD-ETA project was a unique occasion to survey 250 institutions/stakeholders/persons and it resulted a general overview about the status of the natural and cultural value digitization. This comprehensive information gives a solid bases for the measures and actions planned in this document.
The structure of the Action Plan is the following:

1st step: Set up the professional and organizational framework for digitalization of natural and cultural heritage:

- ACTION 1 – Unified local values register
- ACTION 2 – Harghita County Digitizing Center of cultural and natural values

2nd step: Thematic pilot projects to be included in the general regional development policy:

- ACTION 3 – 3D Built Heritage – restoration and presentation
- ACTION 4 – Digitization of historical sites - cemeteries
- ACTION 5 – Touristic application of Harghita County
- ACTION 6 – Digitization of natural attractions and touristic trails
- ACTION 7 – Virtual Gallery of Art – Digitization of the collection of the Cultural and Art Center of Lăzarea
- ACTION 8 – Living Contemporary Gallery in Harghita County
- ACTION 9 – Digitization of literary sights, location-based stories as intangible values in Harghita county
- ACTION 10 – Digitization of Libraries and archives in Harghita
- ACTION 11 – Digitization of village museums

After the elaboration and implementation of the Action Plan, based on the achievements of the survey and the opinion of the CD-ETA partnership, in the next step of the CD-ETA project Harghita County Council will propose a regional strategy for digitization which can be included into the Development Strategy of the CENTRU Region.
I. Actual situation of the Digitization of Natural and Cultural Heritage in Harghita County

1. General information

| Project: CD-ETA, Collaborative Digitization of Natural and Cultural Heritage |
| Partner organization: Harghita County Council |
| Other partner organizations involved (if relevant): None |
| Country: Romania |
| NUTS2 region: Central Region |
| Contact person: Zonda Erika, Kovács-Nagy Erika |
| Email address: zondaerika@hargitamegye.ro, kovacserika@hargitamegye.ro |
| Phone number: +40 266 207 700 |

In Romania the general informational circuits are not well defined, and the degree of interoperability is reduced so the natural and cultural institutions/organizations own and manage separate databases (National Heritage Institute, National Archives, National and University Libraries).

In Harghita county it hasn’t been a general survey carried out among the institutions or organizations which have databases considering the preservation and promotion of natural and cultural values/heritages until now. The elaboration of the Action Plan in the frame of the CD-ETA project was a unique occasion to survey 250 institutions/stakeholders/persons and it resulted a general overview about the status of the natural and cultural value digitization. This comprehensive information gives a solid bases for the measures and actions planned in this document.

The following steps were carried out during the survey:

1. Inventory of institutions/organizations which have databases and experiences in digitalization. List of initiations and achievements in the field of cultural and natural values protection and digitization.

2. Elaboration of a questionnaire and survey of the stakeholders with the help of a standardized questions.

3. Personal meetings with the most important stakeholders.
4. Summary of the experiences, knowledge and good practices of different separated organizations, SWOT analyses.

Harghita County Council plays an important role in the preservation and promotion of the cultural and natural heritage. Harghita County Council has 8 subordinated institutions dealing with different aspects of culture and nature:

- Cultural Center of Harghita County;
- Kájoni János Library of Harghita County;
- Harghita County Development Agency;
- Harghita County Council Mountain and Cave Rescue Public Service;
- Center of Traditional Culture of Harghita County Council
- Harghita County Artistic Folk School
- Hargita Népe Publishing House
- Harghita Publishing House
- Cultural and Art Center of Lazarea

All of these institutions are interested in the digitization of Natural and Cultural Heritage of Harghita County.

With the help of the survey we gathered information which is summarized in the frame of the SWOT analyses. Based on this survey revealed that according to the estimation of the interviewed less than 20% of the cultural and natural heritage is registered in a digital database and the digital reproduction of the values is even less.

Please describe the status of the digitization in your field of activity/institution!

| Systematic continuous digitization process | 4% |
| Open access digital database/value register | 6% |
| Periodic actions, projects | 19% |
| Tools for digitization | 30% |
| Several digital databases | 29% |
| No digitization actions | 12% |
Does your institution have actual digitization strategy?

- Yes: 82%
- No: 15%
- I don't know: 3%

How is ensured in your institution the public access to the digital collection?

- Not available in any form: 44.0%
- Free on the website: 36.2%
- Purchasable on digital storage devices (CD, DVD): 9.2%
- Visualization tools (touchscreen, AR and VR): 7.7%
- Other: 3.8%
- Free mobile app: 1.5%
- Online with payment: 0.8%
- Free on digital storage devices (CD, DVD): 0.8%

Which are the biggest obstacles of digitization in your institution/field of activity?

- No obstacles: 0.9%
- All of these: 2.3%
- Lack of strategy, unified system/scheme: 4.7%
- Lack of tools: 14.0%
- Lack of professionals: 29.9%
- Lack of financial sources: 30.8%
- Other/Doesn't know: 17.3%
Do you collect any data about the usage of your digital collection?

Is any part of your digital collection stored in digital archives according to the international standards of data storage?

Which financial resources are available for digitization in your organization?
Interesting fact, that the institutions dealing with natural and cultural values spent in the last 3 years only 9000 lei (2000 euro) in average for digitization actions and only 62 persons are employed part time in digitization around the whole county.

This action plan covers 5 categories of heritage/values to digitize. These categories are represented by many stakeholders: Public Institutions, NGOs and individual persons.

1. Digitization of natural heritage:

Situation: The most active institutions that have already started the digitization of their data are the organizations dealing with natural heritage. Especially the Mountain Rescue Service of Harghita County Council has significant results in the digitalization of the mountain trail routes, rock climbing routes, mountain bike routes etc. Another practice to follow: The Pogány-Havas Micro-regional Association collects Romania’s most beautiful and oldest trees using standardized data collection tools. The two National Parks and the management organizations of the Natura 2000 sites have built an immense online database and the natural preservation objectives of the Parks appear digitalized on their homepage such as wildlife management zones, flood protection zones, the lists of the protected plants and wildlife in the area. Most of the other organizations already have a digitized data base but only in a very basic form. The most important experiences of the projects implemented until now are the urgent necessity of institutional framework, professionals, as well as methodology, in order to avoid the creation of not connectable databases. For example, in the last period during the digitization of touristic trails some databases were created in such a way that these are not usable anymore due to the differences of data collection methodology. The following SWOT analysis will provide more details.

Main actors and stakeholders in natural value digitization:

- Cheile Bicazului - Hăşmaș National Park
- Călimani National Park
- Management organizations of the Natura 2000 sites
- Harghita Community Development Association
- Mountain Rescue Service of Harghita County Council
- Pogány-Havas Micro-regional Association
- Harghita County Environmental Protection Agency
- Lost World Natur Protection Association
- Tourism and Caving Association or Transylvanian Carpathia Society of Csíkszád
- Development Associations of Local Authorities: Hargitha Development Association of Local Authorities, Bogát ADI, Felcsik and Felcsik Microregional Associations, Felső Homoródmonte Microregional Association, Sóvidék Microregional Association, G10 Microregional Association etc.
• Important natur protection NGOs: Zooroyal Association, Romanian Bats Association, Green Zone Association, Misgurnus Association, Green Seklerland Association,

2. Digitization of museums and art galleries

Situation: In Harghita County the museums and galleries usually have some digital database about their collection. This database is mostly only descriptive, the digital reproduction of the collection or artworks as well as sophisticated AR systems are missing. There are numerous valuable small collections of folkart objects in village museums around Harghita county and the professional scientific survey/inventory as well as the digitalization of these valuable assets is not resolved.

Museums and Galleries in Harghita county:
- Haáz Rezső Museum
- Tarisznyás Márton Museum
- Csíki Szekler Museum
- Molnár István Museum
- Mártón Áron Museum
- Szalmakalap Museum Körispatak
- Art Association of Transylvania
- Mult Idok Haza Association of Traditions
- Village Museums (cca. 20) and other local folkloric collections
- Folkart Assotiation of Udvarhelyszék
- Art Gallery of the Harghita County Council
- Pro Art Gallery
- Art Gallery of the Csiki Szekler Museum
- Art Gallery Kuszutura & fia

3. Digitization of intellectual and intangible cultural heritage

Perhaps the most valuable cultural heritage of Harghita county are the living traditions, folklore, ethnographic richness (folk music, traditional crafts, oral history etc.), which can be experienced even in the everyday life of the locals. About this interesting world several analog and digital records, collections has been made during the last years. The most important task in this activity field is, beside ensuring the permanent recording process, the promotion following a coherent strategy in order to exploit these values for touristic purposes.

Main actors and stakeholders in digitization the intellectual and intangible cultural heritage:
- Association for Harghita County
- Harghita County Heritage Conservation Center
- Harghita County Arts Folk School
• Visus Cultural Association
• Harghita National Szekler Folk Ensemble
• Pro Theatrum Fundation
• Artera Fundation
• Örökség Association
• Association of Hungarian Folk Artists in Romania
• Cultural Association of Udvarhelyszék
• Kriza János Ethnographic Society

4. Digitization of libraries and archives

Situation: The Kájoni János Library of Harghita County as the greatest public Library of Harghita County, has experiences in digitization since 2009, and the institution is interested in digitization of the cultural heritage in Harghita county. Since 2009 the Library has digitized several issues and publications, particularly valuable items concerning local history and knowledge, some of them regarded as rarities. Beside these the county library pays big attention to the online publication of the regional-local (county relation) contents and providing services: due to the regional-local content online databases the institution disseminates the results of local history researches and helps raising awareness about regional cultural values and knowledge. The county library disposes modern tools for digitization activities: professional scanner (it makes possible to digitize valuable, rare documents, unique writings, old books, publications in big format and photos) and suitable software.

There are numerous tasks on the level of Harghita county, what the digitization of pre-digital age archives, church registers, local periodicals concerns. In the local warehouses, archives an enormous material is on the verge of extinction.

Regarding the digitization of the county libraries and archives the biggest obstacles are the lack of professionals and principally the lack of national strategy and coherent legal framework.

Main actors and stakeholders – libraries and archives:
• Kájoni János Library of Harghita County
• Gheorgheni Town Archives
• Odorheiu Secuiesc Town Archives
• Local libraries of villages
• Library Association Pro Libris
• Association Photographic Archives Kováts István
• Association of Hungarian Librarians in Romania
• Church institutions
5. Digitization of historical monuments and sites

The digitization and promotion of the historical monuments and sites is not an unfamiliar issue in Harghita county: spectacular 3D presentations were elaborated about famous buildings and churches using structural funds. These presentations cover only a small part of built heritage worthy of distinction and highlighting. An important part of this is the digital registration of still existing village-views, which is endangered by the expansion of nontraditional modern constructions. In this activity field the problem is also – beside the financial shortage - the lack of strategy, the deficit of system approach and the lack of consistent elaborated and respected regulations.

Main actors and stakeholders – historical monuments and sites digitization:

- Harghita County Cultural and National Heritage Board
- Association for Harghita County
- Church institutions
- LEADER Associations in Harghita (Csik LAG, G10 LAG, Sovidek LAG, Homorod-Kukullo LAG)
- Haáz Rezső Fundation,
- Kőlik Cultural Association
2. Policy context

The Action Plan aims to impact:  

- [X] Investment for Growth and Jobs programme  
- [ ] European Territorial Cooperation programme  
- [ ] Other regional development policy instrument

Name of the policy instrument addressed: Regional Operational Programme Romania ERDF 2014-2020 and 2021-2027

The Romanian Regional Operational Programme\(^1\) sets up a Priority Axis on Conservation, Protection and Sustainable Use of Cultural Heritage, which covers all regions of Romania. The OP regards this priority as being of vital importance to boost development in rural and poorer areas, where the economy is based on agriculture and natural resources. The OP also seeks to tackle the rush of urbanism that hit Romania in the 1990s that damaged cultural heritage. The national OP is justified as the issues it tackles are ones that affect many areas of Romania, which has an even geographic spread of heritage resources.

Specific Objective under IP 6c: Conservation, preservation and promotion of cultural heritage and cultural identity for boosting local development – Several heritage sites are in a poor state, limiting their impact to the local economy and to tourism. The number of heritage sites regarded as being in very good or good condition should rise from 4,387 to 4,437 by 2020.

Actions: The OP finance the restoration, protection, conservation and sustainable use of UNESCO sites, national cultural heritage (regardless of location, urban or rural) and local cultural heritage in urban areas. Complementary objectives of the OP will finance local cultural heritage in rural areas. Although not exhaustive, the following list is indicative of expected activities:

- Restoration, consolidation, protection and preservation of historical monuments;

---

\(^1\) Source: Operational programmes under the goal of Investment for growth and jobs, Author: Greenovate! Europe. [https://www.greenovate-europe.eu](https://www.greenovate-europe.eu).
- Restoration, protection, and conservation of paintings, frescoes and mural;
- Restoration and remodelling fine art facades;
- Interior fittings (facilities, equipment, air conditioning, fire safety, intrusion);
- Facilities for exposure and protection of movable and immovable cultural heritage;
- Marketing and promotional activities for restored objects, including their digitization.

Priority will be given to objects of cultural heritage located in territories which are linked to economic growth, whose restoration will directly contribute to increasing competitiveness in the area where they are located. The OP will also fund projects that implement environmentally friendly solutions, such as using environmentally friendly materials and energy and water efficient equipment, increasing green spaces, and promoting an environmentally sustainable lifestyle. The implementation of such measures will contribute to the conservation, protection and sustainable use of cultural heritage, based on a sustainable approach balanced between commercial and environmental protection, with major benefits for the environment and local communities. Beneficiaries could be local authorities and central government, religious establishments, NGOs and partnerships between these entities.

Budget and Financial Instruments: No financial instruments or major projects are planned. Romania will spend 4.13% of ERDF spending – €276.6 million – on this priority area. €255.3 million of this is for less developed regions, and 21.3 million for more developed regions (Bucharest). The Managing Authority is the Ministry of European Funds.

In the digitization point of view the financial instruments have strong deficiencies. The available funds don’t finance cultural or natural heritage digitization projects itself only if it is connected to restoration works. Because of this, for the digitization projects of intangible values or natural assets there aren’t available financial support from Structural Funds. It would be important to include into the next periods (2021-2027) Structural Funds projects compulsory digitization activity in all restoration projects, furthermore individual digitization projects should reach financial support as itself and it is necessary to create an unique national digitization system. The precondition of this is the elaboration and ratification of a national digitization strategy and establishing the professional background.
II. SWOT Analyses

The SWOT Analyses of the actual situation of Digitization of Natural and Cultural Heritage in Harghita County was elaborated based on the results of the survey made among 250 stakeholders in Harghita. The opinion of the different institutions and individuals from the natural and cultural field was summarized in the following table:
### STRENGTHS
- There are already initiations, basic platforms created for digitizing all the data
- Every employee is very proactive with the idea of developing these data platforms
- The complementary link between institutions dealing with tangible and intangible cultural heritage allows mutual benefits on both sectors even in case of intervention in just one of them
- Uniqueness and absolute value of local artisanal production
- Rich and living local values: beliefs, social practices, folklore, folk dance, folk music, folk crafts.
- The folk art and craft sector attract tourists
- The broadband is relative cheap which is advantageous to digitization and presenting of values
- Good digitization practices: collection of ballads, folk songs, folk music and traditional crafts databases
- Raising number of actors active in the field of digitization (public entities, NGOs, firms)
- Huge presence of natural and cultural heritage in the Harghita County

### WEAKNESSES
- Lack of national digitization strategy or single concept in the field of digitization of natural and cultural heritage
- It doesn’t exist a central database for safe-keeping and recording the intangible heritage
- The lack of financial sources holds back the opportunities for development and modernization
- The actions for digitization of the cultural and natural heritage are episodic and dependent to occasional financing
- Lack of specialized personnel results slower development opportunities
- Shortage of the human resource for collecting the necessary data
- Lack of equipment for the digitizing process
- Knowledge gap and lack of educated human resources regarding to the operation of IT tools and software, to the unique standardized metadating and to the systematic cataloging work.
- There is a lack of databases regarding popular customs and beliefs
- The existing databases are not accessible to everyone in every case.
- The sustainability and standard quality of digitization is
not secured
- The continuity of digitization process is not ensured, often volunteers work on digitalization periodically
- Separated actions devoted to the safeguard of cultural and natural heritage: it is necessary to improve the cooperative and coordinated work, ensuring good coordination
- Lack of knowledge of the real value of local folk art and craft products or local intangible values
- The Craftsmen are not able to sell their products due to the lack of marketing skills
- Few communication about local cultural and natural values, low level of the local identity
- Lack of knowledge on legal issues concerning data protection in local public entities
OPPORTUNITIES

- The existing platforms are on a basic level therefore there are more possibilities on how to connect them together: set up platforms offering a systemic access to existing sites
- Advanced digitization technologies, techniques for the creation of public on-line platforms
- Internal network of the institutions for better and easier data access
- Thanks to mobil IT tools easier access for the public regarding the information about touristic sites or general information about specific places
- Increasing need from the end-users (tourists, researchers etc.)
- New job opportunities
- Fostering an increase in trade and tourism flows in the folk art and craft sector
- Growth in tourism and exploitation for tourism purposes the digitized data could result financial growth for local businesses
- Collaboration between public and private in safeguarding and utilizing strategies devoted to cultural/natural heritage
- Digitization to protect and conserve folk craft production processes

THREATS

- Brain-drain: migration of skilled and educated experts
- Rising work force cost
- Rapid urbanization causes the disappearance of tangible and intangible traditions, values
- Some cultural traditions, folk crafts are on the verge of extinction
- Deforestation will result the disappearance of undocumented animal habitats and flora
- Several natural values are in danger to extinct
- New generations don’t understand the value of local craft production
- Highly-skilled craftsmen and women have become an endangered species
- More and more young people with craftsman family background have chosen other career options which results losing resources and experience of our cultural heritage
- Hungarian tangible and intangible heritage from Transylvania is not supported by the central Romanian Government
- Lack of experience on legal protection of databases in private-public partnerships
III. Action plan

1. Objectives

The general aim of the cultural and natural heritage digitization is the salvage of values, which has importance, because it can result numerous, immeasurable effects in the future. The use of the digitized data is basically the presentation and dissemination of values at local level and worldwide, but further possible usage is in education and in research, and not least the digitalized values can be exploited for territorial (urban and rural) economic development typically in tourism or in the commerce.

The general objective of the Digitization Action plan in Harghita is to create a supporting and inspiring environment for the local organizations to plan and implement coordinated, profound and accurate digitization actions in the field of cultural and natural heritage.

Objectives of the action plan in Harghita county are:

- Provide measures and guidance for new projects, related with preservation and promotion of the natural and cultural heritage.

- Establish concept of coordinated digitization actions based on experiences and lessons learnt in the CD-ETA project

- Summarize existing valuable initiations and provide a common guidance to the continuation of good practices.

- Elaborate a standardized frame of rules, actions, institutions and tools to the digitization of cultural and natural values which can serve as a benchmark for the improvement of the related policy instrument of the region/country

- Promote coordinated digitization actions in the county, awareness raising among stakeholder organizations

- Establish common point of view for heritage conservation and digitization: communication network in the county. Connect existing initiations sharing access to existing databases.

With implementation of the Action Plan Harghita County Council aims to draw up proposals to amend the policy instrument, with the active involvement of the stakeholders, especially with the support of the Agency for Development of Center Region. The improvement of this policy instrument will be possible through providing measures and good practices to follow which can be implemented in the entire Region.
This set of actions describes the necessary measures to be supported in order to develop digitization process bottom up. Expectations are, that the Regional Operational Policy will be modified to include supporting measures for organizations to digitize natural and cultural values based on our Action Plan. The Policy makers will recognize the importance and socio-economic development opportunities connecting to the exploitation of natural and cultural values through digitization. The Agency for Development of Center Region can propose modifications to the existing measures or even create new measures to the future Regional Operative Programme.

After the elaboration and implementation of the Action Plan, based on the achievements of the survey and the opinion of the CD-ETA partnership, in the next step of the CD-ETA project Harghita County Council will propose a regional strategy for digitization which can be included into the Development Strategy of the CENTRU Region.

The structure of the Action Plan is the following:

1\textsuperscript{st} step: Set up the professional and organizational framework for digitalization of natural and cultural heritage (rules of metadating, data sheets, rights and obligations, etc.): Action 1 and Action 2

2\textsuperscript{nd} step: Thematic pilot projects to be included in the general regional development policy:

- Digitization of sites,
- Digitization of Built Heritage,
- Digital Promotion of Touristic routes and natural attractions,
- Digitization of Intangible values (crafts, legends and stories),
- Digitization of Art Collections
- Digitization of Galleries.

3\textsuperscript{rd} step: Implementation and suggestions to improve policy instruments at regional level.
IV. Details of the actions envisaged

ACTION 1 – Unified local values register

1. The background

Between 17 and 19 of October 2017 in Skofja Loka, Slovenia was held the third CD-ETA seminar on topic “Digitization of intangible cultural heritage (ICH)”, where the partners presented practices of Digitization of Intangible Cultural Heritage from their region. The FP7 I-treasures project as a practice was included in the presentations of the Greek and Spanish partners. This project, and the existing initiations of the Hungarian Government, the Harghita County Council and the neighboring Covasna County Council served as a base to the idea of this action.

Greek researchers along with European research centers developed an open and extendable platform (http://i-treasures.multimedia.uom.gr) to provide access to intangible cultural heritage resources and at the same time to propose a novel strategic framework for the safeguarding and transmission of ICH. The Living Human Treasures programme aims at encouraging Member States to grant official recognition to talented tradition bearers and practitioners, thus contributing to the transmission of their knowledge and skills to the younger generations.

The Inventory of the Folk Culture Centre in Estonia was also an inspiring good practice for this action, the establishment of the unique system of local values in Harghita. This registry is operated by the Ministry of Culture of Estonia and in order to compile inscriptions, financial support can be applied for. The digital collection includes objects, photographs, drawings, films, manuscripts traditional handicraft techniques, food culture, traditional rituals, etc. about the Estonian pre-industrial peasant culture, the ancient and current everyday culture of all inhabitants of Estonia.

The Protection and Valorization Experiences made in Florence influenced significantly our point of view about the importance of digitalization of intangible heritage. It also includes the Digitization of:

- craftsmanship and culture: artisanal production and points of sale, traditional craftsmanship,
- oral traditions and expressions,
- performing arts, social practices, rituals and festive events,
- knowledge and practices concerning nature and the universe.

The presented ARTEX project (the Center for Artistic and Traditional Craftsmanship in Tuscany) unfolds activity on four levels similar as our action is planned where all responsible territorial institutions have their role at local, regional and national level. A further development stage of our action (which connects this Action to
the Action of the development of general tourism app of Harghita county) could be similar to the ARTOUR Toscana – The Craft Itineraries initiative. The Craft Itineraries of ARTour are a chance to travel through Tuscany on the trail of traditional crafts, stories and characters from the region's historic craftsmanship.

The Slovenian Register of Intangible cultural heritage showed a clear logic of an unique well-functioning system: which defines the rules on the register of immovable cultural heritage: scope, management and usage of the Register. Anyone can initiate the registration of the immovable cultural heritage unit: the facts and documents that prove the cultural heritage nature of a unit and the Ministry of Culture sends the initiative to the regional office of the Institute for the Protection of Cultural Heritage of Slovenia, which makes an assessment and prepares a proposal on the inclusion. Based on Institute’s proposal Ministry of Culture registers the unit in the register.

Beside these lessons learnt from the project there are in Harghita separated databases of intangible cultural values which will be included to the Unique Value collection:

- Digital database of ballads edited between 2014-2015 (Kriza János Ethnographic Association)
- Kallós Zoltán’s ethnographical collection (genres: ballads, folk music, folk song, nuptials etc.)
- Folk dances database
- Digital folk music database
- Photo documentary about traditional crafts, popular customs

2. Action

The action aims to set up an unified system of value collection in Harghita county from the bottom up. This collection includes all cultural and natural values worthy of distinction and highlighting, the classification, and registry of these values. These values represent the high performance of people from Harghita.

The planned system is a bottom-up building system, anyone is allowed to make a suggestion for a value to the basic collections by filling out the proper standard form at local (village level). A local Committee decides to include the value into the local list of cultural/natural values. After the admission, the local value can be suggested further to the Collection of Harghita County Values and the Committee decides whether the local value might be accepted or not. If something becomes an outstanding county value, then the petitioner has the possibility to submit it to the Collection of Regional values/products and if the Regional product Committee agrees the value can be named as Regional product. All values can be part of this register which are considered the work and outstanding value of the local people, or which are natural values under protection, or which are local products of a superior standard.

The planned common database is a georeferenced based system, where all the
values, managing associations, organizations can be found with exact locations and hyperlinks to gain access to further information.

The aim of this action is to revitalize and promote these values through digitizing methods with the general objective to consolidate the cultural local identity, and to develop the communities through revitalizing traditional values, costumes, trades etc. The register of values has more expected effects:

- salvation of some immaterial components of the cultural inheritance of the community of Harghita County,
- use of digitizing methods and creation a database which enables public access to all information related to these values.
- touristic promotion of traditions, crafts characteristic for this county
- encourage of synergies among handicrafts, cultural heritage and tourism

Activities of the action:

- Establishing the rules of the register of values: scope, management and usage of the register etc. The purpose is to give a frame to people in order to specify and identify their own values, moreover, to contribute the promotion of collected values.
- Setting up the Value Collection Committees at local, county and regional level (Seklerland) in order to create the institutional background of the action.
- Organizing training courses, workshops for the local stakeholders cultural
- Digitization model and methods for values included to the register (Digitalization of traditional handicrafts, Digitalization of the immaterial etc.) using new technologies (link to the Action: Digitization Center)
- The development of a multipurpose web-page including Google map visualization has been started (www.hargitaertektar.ro) and it will be completed with blog and social network site.
- Supporting measures to local and territorial activities of digitization.

3. Players involved

- Harghita County Council as a promoter
- Covasna County Council as a partner
- Local Museums, Collections, Village Houses etc. as local stakeholders
- Local Authorities as members of local Committees
- Local cultural NGOs as members of local Committees
- Regional Development Agency
4. **Timeframe**
   2019-2023

5. **Costs**
   Estimation: 250,000 euro (establishment), 50,000 euro/year (operation)

6. **Funding sources:**
   - State and Structural Funds: Regional Development Programme
   - Harghita County Council’s own sources, funding programs
   - Local Authorities financial sources
ACTION 2 – Harghita County Digitizing Center of cultural and natural values

1. The background

The idea of the action raised from the good practice of National Geographic Institute (IGN) in Madrid, Spain, presented in CD-ETA project. The objective of the Contents Hub "NCO Viewer" is to publish georeferenced information in a centralized way, avoiding its dispersion and thus reducing the cost of maintenance and implementation of those organisms that want to give access to their information, avoiding its dispersion in several websites.

Similar to the presented project, also in Harghita county organizations have problems publishing digital or georeferenced information, resulted by lack of personnel or funding, for example:

- multiple consultancies
- multiple implementation and maintenance costs
- multiple viewers
- difficulty accessing information
- content distributed on different webs

The presented HUB gives service to organisms that want to publish their Thematic Geographic Information through a viewer, and offers the help needed to manage the information in this collective database. With this collaborative mapping through a simple viewer, users can consult the info that interests them by choosing the desired layers. The project schema is using a common online platform and database, defining what geo-services or contents are going to be available and how the user is going to interact with them, then the portlet can be embedded in as many web pages as you want.

The resources needed are technical and personal resources of public administration. Technicians and administrative staff working part/full time in the project. The difficulties that are encountered are contacting different entities that can use the tool. It is difficult to disseminate the actions to be carried out. Homogenize the information of the different entities to enter them in the tool. Often, organizations that publish their own geographic information, had problems publishing information georeferenced, with dynamic viewers. Many end up publishing with static or alphanumeric display. They publish the information only on their website, so that sometimes you can't reach this web sites because they are poorly positioned, hidden. For instance, Mountain Federations that have registered long-distance travels.

The good practice give the idea to Harghita County Council to initiate a project and establish a Digitization Center to provide digitization and maintenance services to small cultural organizations, NGOs etc.
2. Action

The action aims to set up a Digitization Center in the frame of the Harghita County Council or one of the subordinated institutions. This Center provides digitization services and know-how to cultural, natural, traditional or artistic organizations in the county that do not have the necessary equipment, funding or personnel to create and manage their own digital database. The Digitization Center would be a cost-effective method to organize digitization process ensuring professionalism, newest technologies and standardized methods.

This Digitizing Center will offer help and support to smaller organizations which manage natural, cultural, artistic or historical heritage and lack the recourses for digitizing their collection (ex. Small folk museums/collections, Craft NGOs, Traditional Organizations, workshops, galleries, libraries, etc.).

The aim of this action is to revitalize and promote the local values of villages, providing technical, intellectual and personal support to cultural and natural organizations.

The Digitization Center has a close connection to the Action 1 and has more expected effects:

- salvation of some immaterial components of the cultural, artistic and historical inheritance of the villages in Harghita County,
- public access to all information related to these values using digitizing methods and creating a database
- touristic promotion of living traditions, crafts characteristic for this county
- encouragement of synergies among cultural and natural organizations

Activities of the action:

- Establishing the Digitization Center: office, equipment, skilled personnel, software etc. The purpose is to give an institutional background to interconnect separated initiations of heritage collection and protection, and boost digitization process of the values also in small settlements.
- Continuous development of the technical and professional skills of human resources
- Organizing training courses, workshops for the local cultural/natural stakeholders
- Promotion campaigns and demonstrations to present the services of the Digitization Center to stakeholders and to raise awareness about the importance of register natural and cultural values.
- Developing a multipurpose web-page presenting the digitalized information on the values (same as Action 1)
• Networking activities to encourage the exploitation of digitalized values to economic purposes (ex. in tourism)

• Regular digitization activities in the county: local values, digitalization of collections kept in village museums and the intangible values (traditional events, folkcrafts, etc.) as well as management of photo archives.

• E-culture – digital multipurpose event calendar: the register of cultural events in the county, which includes the evaluation and the impact measurement.

3. Players involved
   • Harghita County Council as a promoter
   • Neighboring County Council’s as partners
   • Local institutions, organizations as local stakeholders
   • Local Authorities as members of local Committees
   • Local cultural NGOs as members of local Committees
   • Regional Development Agency as policy maker

4. Timeframe
   2019-2021

5. Costs
   Estimated cost: 500,000 euro for the establishment and 150,000 euro/year operation costs.

6. Funding sources
   • State and Structural Funds
   • Harghita County Council’s own sources
   • Funding programs and Local Authorities financial sources
ACTION 3 – 3D Built Heritage – restoration and presentation

1. The background

A particular technical solution used by a CD-ETA good practice give the idea to this action in Harghita county. The practice was the Fortezza da basso in Florence: new technologies for surveying and restoration. This project revolutionary uses new digital technologies, as laser-scanning, representing a breakthrough innovation for restoration: the best practice offers details about geomatics-based process.

The Municipality of Florence promoted a research to restore "Forteza da Basso", one of the principal examples of 16th century military architecture in Italy and thus cooperation was signed among the Municipality, the University of Florence (GeCo Lab), the Military Geographic Institute and the National Research Council (Institute for the Conservation and Valorization of Cultural Heritage). GeCo Lab realised a virtual model. Photogrammetry and both ground and mobile scanning systems were used to survey the inside and the external perimeter: they generated over 3000 images and more than 530 scans to produce almost 17 billion point giving the position and size of every block of stone.

The research was funded by the Municipality of Florence. 2 PhDs and 1 fellow student were required to set up and run the project. Tools and equipment were provided by GeCo Lab and the Military Geographic Institute; mobile systems were provided by the above-mentioned companies and institutions which supported the research.

The coordination of different type of work teams has caused difficulty because the Centre was open for the public with activities like trade fairs and exhibitions.

This work is an integrated survey and the Fortezza has become a training ground for new technologies to be researched and tested out. All of this is aiming to the benefit of cultural heritage.

Thanks to the increasing value of its density and accuracy the created point model provides an archive of information that can be used in the future as interpretative documentation role.

This project was not generated for one specific objective; thus the real value of this data lies in the fact that it can all be reused for any other purpose. This could include new opportunities, targeting new priorities or public presentations.

The experiences of these projects and the presented good practice during the CD-ETA project give the bases for the Action.
2. Action

The action aims to set up an unified system of value collection in Harghita county containing digital mapping, promotion and visual restoration of historical monuments. This action includes all monuments worthy of distinction and highlighting, the classification, and registry of these values. These values represent the high performance of people from Harghita. The planned system is a digital database that would be compatible with smart devices (ex. phones, tablets) and can function as an interactive AR (Augmented Reality) software.

The platform developed to visualize the database will be able to present the picture of the building in different times, this “worlds” could be overlayed onto the real world that you see through your mobile device’s camera. An AR layer for architecture would be available as a real-world-overlay that comes with special features. There is a need to build a huge database of former and existing, interesting architectural works (castles, chateaus, churches etc.). Within the 3D layer, there would be an AR-view perspective map and a walkable pedestrian route can be shown for every listed piece of architecture, monument, places of interest within the specified neighborhood.

Building an incredible visitor experience is essential to a touristic destination’s success. Augmented reality (AR) has an important part to play in this success as it begins to enhance real-world experiences through mainstream technologies. The latest smartphone apps use AR technology to add a layer of guidance, content and entertainment to physical locations seen through the phone’s camera view. AR has become more widely-used since then and has moved closer to the zone for technology that has meaningful applications. Augmented reality has been integrated into applications for translation, the arts, education, commerce and more.

Our aim with this action is to build a specific app for tourism and researchers as an “interactive, real-time guide” intended to enhance the visitor experience. The aim of this action is to revitalize and promote the heritage buildings through digitizing methods with the general objective to consolidate the cultural local identity. The action has more expected effects:

- Salvation of the built heritage of Harghita County including landscapes, village views.
- Accessible database using digitizing methods, which enables public access to all information related to these values.
- Touristic promotion of buildings, objects characteristic for this county
- Synergies among historical, cultural heritage and tourism

Activities of the action:

- Digitizing and mapping of the historical monuments, built heritage.
- Scanning in 3D the monuments and artefacts with the required technology
- Organizing training courses, workshops for the local stakeholders
- Reconstructing digitally the deteriorated monuments and artefacts
• Putting together the 3D models with GPS based mapping systems
• Developing a multipurpose web-page presenting the digitalized information on the values (Blogs, social network, visualization of values using Google maps)
• Supporting local and territorial activities of digitization.

3. Players involved
• Harghita County Council as a promoter
• Neighboring County Council’s as partners
• Harghita County Cultural and National Heritage Board
• Association for Harghita County
• Church institutions
• LEADER Associations in Harghita (Csik LAG, G10 LAG, Sovidek LAG, Homorod-Kukullo LAG)
• Haáz Rezső Foundation,
• Kőlik Cultural Association
• Local Authorities, Local cultural NGOs
• Sapientia University of Transylvania
• Babes-Bolyai University of Cluj-Napoca

4. Timeframe
2018-2023

5. Costs
Estimated costs: 500,000 euro (depending to the number of objects included into the action).

6. Funding sources:
• State and Structural Funds
• Harghita County Council’s own sources
• Local Authorities financial sources
ACTION 4 – Digitization of historical sites - cemeteries

1. The background

This activity is based on the demonstration of PP University of Patras. This Partner organization focuses on “Digitization of historical sites” (the content of the thematic seminar on Semester 5). The knowledge for digitization of archaeological sites was the thematic of the 4th Thematic Seminar organized on 13-15 March 2018 within the frames of the European Project "Collaborative Digitization of Natural and Cultural Heritage, CD-ETA" (INTERREG EUROPE).

The Thematic Seminar was held in Athens, Patras and Ancient Olympia, focusing on policies and good practices for the digitization of monuments and archaeological sites. In particular, in Athens was organized a study visit at “Tholos” - Virtual Reality theatre.

On Thursday 15th of March 2018, the Thematic Seminar took place in Ancient Olympia. Dr. Erofili- Iris Kolia, Director of the Ephorate of Antiquities of Ilia hosted the project partners and stakeholders at the Conference and Exhibition Center of Olympia, where held the presentations from project partners regarding the policies and good practices for the digitization of monuments and archaeological sites. Additionally, experts on this field had very interesting presentations related to the thematic seminar.

Within the frames of the 4th Thematic Seminar very interesting good practices were presented, like the Digital Exhibition of the Museum of the Olympic Games of Antiquity in Olympia, and The ToposText Mobile App: Private Cultural Initiatives and Public Goods.

These examples and ideas were the bases of our action which aims at mapping and digitizing old cemeteries in the region as historical sites and/or monuments. The presented technical solutions (apps, augmented reality experiences etc.) impressed the delegation of Harghita County Council and encouraged to develop an Action to adapt the lessons learnt in the CD-ETA project. The idea is, that lot of our local culture is buried in our cemeteries and it would be necessary to register in digital data the tombs where the persons are buried who played an important role in local life.

2. Action

The action aims to develop a database, software and an application in Harghita county with information of people buried in cemeteries. This collection includes all personal, cultural and historical data connecting to the persons buried in the cemetery site. This database is representing the cultural, genealogical and historical information of people from Harghita.

A "Historic monument - Location - Site" can be any building, landscape, area or structure which are locally, regionally or nationally important. A " Historic monument -
Location - Site" is an official location where there are parts of political, military, cultural or social history, which have been preserved because of the value of their cultural heritage. Cemeteries and graveyards can be included in all of these categories especially in Transylvania where during the last century several changes took place regarding the regime and the ethnic composition.

The planned database is a location-based system, anyone is allowed to make a suggestion for a tomb/cemetery to include in the basic collections by filling out the proper standard form as well as registering the position of a tomb. A local Committee (see action 1) decides to include the information into the general list appearing on online platforms/apps. After the admission, the local value can be suggested further to the Collection of Harghita County Values and the Committee decides whether the local value might be accepted or not. The tomb of people who played an important role in communities' life (leaders, actors, researchers etc.) will be classified.

The aim of this action is to make a database of the cemeteries/graveyards containing information of the people who are buried there and promote their historic role through digitizing methods with the general objective to consolidate the cultural local identity, and to keep record of the cemeteries. Because of low financing a lot of old gravestones with historical significance have deteriorated making the identification of information on them almost impossible. The register of cemetery sites has more expected effects:

- Salvation of old tomb stones that are components of the cultural inheritance of the community of Harghita County,
- Using digitizing methods creating a database which enables public access to all information related to these people/values,
- Easier information access for people about passed away relatives in old times,
- These records may provide demographic values as well, because cemeteries have written records of the deceased (genealogical information, place of birth, cause of death, etc.)

Activities of the action:
- Set up an action group (archeologists, employees of NGOs, Institutions, volunteers)
- Ensure funding for digitization actions.
- Establish the rules on the register of information: scope, management and usage of the register etc.
- Organization of training courses, workshops for the local stakeholders
- The first phase is to ensure that plot maps and registers are digitized/scanned: scan books and maps for cemeteries.
- Transcribe the records from the registers. Transcribing fields such
forename, surname and year of burial and linking these records through to scanned register pages will enable speedier access to the records by members of the groups and will also create opportunities to open the records up to the public and perhaps earn revenue.

- Developing a multipurpose application and web-page containing the digitalized information about the cemeteries (information about the deceased, tomb mapping system, cultural and historically significant information): After digitizing and transcribing the records the next step is to placing the burial records online for the public to access either “free of charge” or on a “pay per view basis” generating extra revenue for the implementation of the action.

3. Players involved
   - Harghita County Council as a promoter
   - Neighboring County Council’s as partners
   - Archeologists and organizations of archeologists
   - Local churches and parishes as partners
   - Local Museums, Collections, Village Houses etc. as local stakeholders
   - Local Authorities as members of local Committees
   - Local cultural NGOs as members of local Committees

4. Timeframe
   2019-2021

5. Costs
   Estimated costs to digitize all important cemeteries and cemetery sites in Harghita: 300.000 euro

6. Funding sources:
   - Possible State and Structural Funds
   - Harghita County Council’s own sources, funding programs
   - Local Authorities financial sources
ACTION 5 – Touristic application of Harghita County

1. The background

During the CD-ETA project was presented the good practice IWALK.BG – 3D project which is a tourist and educational platform with the main purpose to digitize the cultural and historical sites, museums, cultural monuments and all valuable objects and jewels reflecting the spirit and the imprint of history. The conceptual design involves filling geographic maps with digitized object and building mobile applications.

IWALK is a still in development concept conceived in Bulgaria that makes a meeting of the past and the future in the present through modern information technologies of digitization, VR and Augment reality.

The vision of the platform itself is a 3D graphics with a strikingly fabulous styling and practically unlimited possibilities for presenting objects (cultural and historical monuments, wineries, restaurants, hotels, attractions, etc.) through multimedia. The platform has the possibility to offer:

- 3D graphic image with text
- Audio record with voice-over and music
- Video in different variations, depending on the specific subject
- Virtual and augment reality
- Unlimited combinations of 3D graphics, audio and video
- Submission of notifications for nearby objects by tracking the GPS coordinates of the tourist
- Recovering destroyed historical objects through 3D virtual reality
- Creating a completely new experience by restoring historical events through augment reality

The resources needed for this project are 4-6 professionally trained people, with well-established business plan for 2-4 years. IWALK takes into consideration the resources in the qualification of people, public significance, the scale of the project and lastly, the financial resources. For 100 objects to be digitized and implemented in the project the cost is about 180 - 200 000 €.

The evidence of success can be seen at IWALK.BG - a 3D tourism and educational platform with UN World Prize nomination in “Culture and Tourism” category. Tourists enjoy facilities throughout Bulgaria with holographic images of many monuments and archeological sites, and the magnetic/QR cards from which the cultural and historical objects come to life, like holographic images. The biggest challenge is to convince people of all generations about the significance and future of digitization and to make them experience the need for it themselves. It is also hard to work with archaeologists on restoration of destroyed objects, monuments or buildings and implementing them in this digital platform.

IWalk platform is based entirely online and enables the user to get acquainted
with Bulgaria's cultural and historical monuments, nature landmarks, flora, fauna through virtual walks, 3D recoveries, interactive multimedia and all of this presented in 3D graphical environment.

The iWalk platform can be transferred and used for each country. A great interest in this product is shown by large companies, institutions and organizations outside the country.

The planned action is also based on the experiences gained during the implementation of the project “The promotion of the assets and traditions of Harghita and Covasna as touristic products” financed by the European Regional Development Found through the Regional Operational Programme 2007-2013. The general objective of the project was the improvement of the country’s image and increasing its economic and touristic attractiveness, through promoting the touristic attractions of Harghita and Covasna counties and realizing a unique profile of the two county’s touristic offers.

2. Action

The action aims to set up a general touristic application in Harghita county containing digital mappings and restorations of historical monuments viewable with AR and VR technology. This collection includes all touristic attractions worthy of distinction and highlighting.

The planned system is a digital database that would be compatible with smart devices (ex. phones, tablets) and will function as an interactive AR (Augmented Reality) software. This application will be able to use suggestions put forward by hand-picked spotters who know the best places in the area. It will cover neighborhoods, attractions, restaurants, bars and concerts, and covers “tailored local content”.

It would also include a scheduling system where tourists can plan their trip, select the monuments or places they want to visit and the app will show them the best route to take so they can visit all of them, taking in consideration the visiting hours as well. The platform could plug tourists into local cultural events that they are likely to be interested in.

There would be stacks of categories in here, covering all types locations, like museums, galleries, national parks and would have the capability to show tourists the one that is closest to them and take in consideration the places they have already visited. Tourists could get alerts about events in advance too.

The aim of this action is to revitalize and promote the cultural and natural values of Harghita County and ensure the visibility of touristic attractions through digitizing methods, with the general objective to consolidate the cultural local identity, and to develop the communities with boosting tourism, revitalizing traditional values, monuments, local flora, fauna and landmarks trough virtual walks.
Activities of the action:

- Gathering the information that needs to be digitized with local collaborations
- Digitizing and mapping of the historical monuments, cultural locations, natural parks, or any other location based information that is connected to the Counties cultural and natural heritage.
- Scanning in 3D the monuments and artefacts with the required technology
- Augmented reality Restoration of the monuments that are partly intact
- Developing the general touristic application with the following attributions:
  - GPS based location and mapping system, AR/VR functions, AR-code scanning capability, scheduling functionality, rating system and commenting section for all attractions, events and locations.
  - Combinations of 3D graphics, audio and video
  - Audio record with voice-over and music
  - Video in different variations, depending on the specific subject
  - Submission of notifications for nearby objects by tracking the GPS coordinates of the tourist
  - Recovering destroyed historical objects through 3D virtual reality
  - Creating a completely new experience by restoring historical events through augment reality
- Organizing training courses, workshops for the local stakeholders
- Reconstructing digitally the deteriorated monuments and artefacts
- Putting together the 3D models with GPS based mapping systems
- Developing a multipurpose web-page presenting the digitalized information on the values (Blogs, social network, visualization of values using Google maps)
- Supporting local and territorial activities of digitization.
- Promoting the finished app/platform

3. **Players involved**

- Harghita County Council as a promoter

**Partners:**

- Cheile Bicazului - Hășmaș National Park
- Călimani National Park
- Management organizations of the Natura 2000 sites
- Harghita Community Development Association
- Mountain Rescue Service of Harghita County Council
- Pogány-Havas Micro-regional Association
- Harghita County Environmental Protection Agency
- Tourism and Caving Association or Transylvanian Carpathia Society of Csíkszék
- Development Associations of Local Authorities: Hargitha Development Association of Local Authorities, Bogát ADI, Felcsík and Felcsík Microregional Associations, Felső Homoródmente Microregional Association, Sóvidék Microregional Association, G10 Microregional Association etc.
- Important nature protection NGOs: Zooroyal Association, Romanian Bats Association, Green Zone Association, Misgurnus Association, Green Seklerland Association,
- Association for Harghita County
- Harghita County Heritage Conservation Center
- Harghita County Arts Folk School
- Harghita National Szekler Folk Ensemble
- Pro Theatrum Fundation
- Artera Fundation
- Örökség Association
- Association of Hungarian Folk Artists in Romania
- Cultural Association of Udvarhelyszék
- Kriza János Ethnographic Society

4. Timeframe
   2018-2023

5. Costs
   Estimated costs: 500,000 euro

6. Funding sources:
   - Possible State and Structural Funds
   - Harghita County Council’s own sources
   - Participating Local Authorities financial sources
ACTION 6 – Digitization of natural attractions and touristic trails

1. The background

The Action is based on the experiences gathered during the visit in Valencia, and the good practice presented: Digitalization of natural areas in the region of Valencia.

This practice aims at creating a collection that consists of large amounts of cartographic data in one single viewer, making it accessible to both professional and general users through a single application. The main problem is the dispersion of information and the need for digital cartography that is simple and accessible to all kinds of users. Another problem is the vast quantities of information generated by the different departments that must be managed and put together at the service of the departments and users. Through this project it is possible to have access to the complex cartography information by the amount of data it handles (1110 layers) but made simple in its visualization/handling and centralizing all the information in a single viewer.

This project benefits every single department that works with cartography and external users who want access to this information. This practice makes the information available to professionals, both civil servants and external technicians and on a personal level to all persons who want to consult this thematic map.

The recourses needed for this project are technical and personal of the public administration, technicians and administrative staff of various regional ministries working part/full time in this project.

This practice allows access to civil servants, external technicians and non-specialized citizens. It makes available to these people 1100 layers of information integrated in a single screen. The difficulties that were encountered are the huge amount of data, which are difficult to handle, also the information is very scattered.

This system allows to display in a single screen, and through a simple interface, large amounts of data from different cartographies. It is possible to select the data series to be visualized, selecting the different layers of information, and thus to see how the different infrastructures, protected areas and future infrastructure interact.

The Slovene nature conservation database give another impact to our action. This database is established and maintained by the Institute of the Republic of Slovenia for Nature Conservation and the Environmental Agency of the Republic of Slovenia. Databases are available to the public: Regulations and documentation, digitized online register of natural heritage with presentation of all Slovenian data related to nature conservation. It is an interactive geographic information system with information about the natural areas in Slovenia and offers information and support for protection of natural heritage. It is also a useful tool for spatial planning, research, education and fostering public awareness of heritage.
2. Action

The action aims to set up a unified system of cartographic information of Harghita Counties mountainous zones. This collection includes natural values worthy of distinction and highlighting, the classification, and registry of this values. The planned system is a multi-layer map viewing platform that include mountain trails, mountain retreats, or even climbing paths on cliffs trough a single application.

This platform could help in rescue operations, give better insight to the people who want to go hiking. More than 60% of the county is mountainous terrain, which means approximately 4000 km², if we divide this area with 50 citizens, we arrive to the conclusion that one mountain rescuer must cover more than 80 km². It has two National parks and over 30 natural reservations. The walkable trails are over 1700 Km and about 500 Km trail for mountain biking. These have been partly digitized by the Salvamont Harghita Rescue Association and can be viewed at [http://www.gis-it.ro/hrtracks/indexhu.html](http://www.gis-it.ro/hrtracks/indexhu.html).

The aim of this action is to digitalize the trails of these mountainous lands consist of 3 major categories:

- The digitization of the mountain trail routes.
- The digitization of the rock-climbing routes.
- The digitization of the mountain bike routes.

This database would include extra features, like land elevation, trails difficulty grading, weather forecast information and alerts, information about local animal dangers (ex. brown bear, wolfs, warthog, etc.), saves the route that was taken and also live track function, and emergency alert function.

Another worthy feature that could be implemented is tagging system, where you can tag hazards, information, photos, leave messages at exact locations.

The creation of this platform has more expected effects:

- creation of a database which enables public access to all information related to the natural values of the county using digitizing methods
- touristic promotion of natural heritage characteristic for this county
- encourage synergies among natural heritage and tourism
- growth in tourism in many remote locations
- Nature Conservation Atlas
  - Valuable natural features / Natural heritage
  - Protected areas
• Natura 2000 sites
• Ecologically important areas (geomorphological, geological, hydrological, botanical, zoological, ecosystem natural value, trees, landscape value)

Digitization of natural heritage is expressed only in capturing natural sites, plant and animal species in their natural environment. Mainly for promotion of natural sites as tourist destinations or research purposes by periodically capturing a single natural object - tracking its change over time.

Activities of the action:
• Set up unique Digitization model and methods concerning natural heritage
• Organizing training courses, workshops for the local stakeholders
• Developing a multipurpose web-page and application presenting the digitized information on the natural values and trails (Blogs, social network, visualization of values using Google maps)
• Supporting local and territorial activities of digitization.
• Promotion of the web page and application.

3. Players involved
• Harghita County Council as promoter

Partners:
• Mountain Rescue Service of Harghita County Council
• Cheile Bicazului - Hășmaș National Park
• Călimani National Park
• Management organizations of the Natura 2000 sites
• Harghita Community Development Association
• Pogány-Havas Micro-regional Association
• Harghita County Environmental Protection Agency
• Lost World Natur Protection Association
• Tourism and Caving Association or Transylvanian Carpathia Society of Csíkszék
• Development Associations of Local Authorities: Hargitha Development Association of Local Authorities, Bogát ADI, Felcsik and Felcsik Microregional Associations, Felső Homoródmente Microregional Association, Sóvidék Microregional Association, G10 Microregional Association etc.
- Important natur protection NGOs: Zooroyal Association, Romanian Bats Association, Green Zone Association, Misgurnus Association, Green Seklerland Association,

4. Timeframe
   2018-2023

5. Costs
   Estimated cost: 500,000 euro

6. Funding sources:
   - Possible State and Structural Funds
   - Harghita County Council’s own sources
ACTION 7 – Virtual Gallery of Art – Digitization of the collection of the Cultural and Art Center of Lăzărea

1. The background

The digitization action of the Cultural and Art Center of Lăzărea’s collection (https://ccal.ro/) is a continuation of an ongoing process, which will be improved by the lessons learnt in the frame of the CD-ETA project. Our action to digitize the art collection of the Cultural and Art Center of Lăzărea was inspired by one of the good practices presented in the frame of the CD-ETA project: The Virtual tour of the Tribuna degli Uffizi (Toscana, Italy). The Digitalization period of the famous Uffizi lasted from 2014 January till 2014 October.

This project aimed at offering the visitors the possibility to better appreciate the artworks earlier and even after the visit.

The Tribuna of the Uffizi is a large octagonal room, an architectural masterpiece of the sixteenth century, designed by Bernardo Buontalenti. The project “Virtual tour of the Tribuna degli Uffizi” aims at offering the visitors the possibility to better appreciate the works of art and enjoy the beauty of its architectural elements after the restoration work coordinated by the ex Director Antonio Natali, thanks to financial support provided by Fondazione Friends of Florence.

The project followed a mathematical basis for high resolution reproduction of works of art and architectural. The technology helped in producing a 3D model which is useful for scientific aims. The virtual tour has been carried out by means of Unity 3D, a platform devoted in the creation of interactive 3D environments.

The main beneficiaries of this project are the visitors, who have the possibility to continue to make a virtual tour in a very detailed way.

The process of digitizing lasted nine months; it was carried out by an architect, two art historians, two professional technicians for structured-light scanners, two graphic experts and a software developer engineer.

The project has gained great interest, and the developed models have been reused for software support by latest techniques for augmented and virtual reality.

During the digitization process of the statues, it was made possible to solve all the problems linked to the integration of detailed 3D models into the software, thus setting up interactive three-dimensional environments.

The lessons learnt from this good practice helped to design our action which aims at digitizing the diversified art works kept in the Cultural and Art Center of Lăzărea. The increased adoption of broadband, and improvement in web programming techniques opens up the opportunity for improved display of art online. Whilst no online gallery yet uses light filtering effects, and 3d photography is not yet available, much richer images and improved display techniques provide the viewer with a much richer experience.
2. Action

The action aims to develop the virtual gallery of the art collection that was once kept in the Lázár Castle of Szárhegy (https://ccal.ro). This virtual gallery includes all cultural and artistic values worthy of distinction and highlighting, the classification, and registry of this values. This collection created by the annual gathering of famous artists from all over the world, who left there a one of their work of art every year. The International Art Camp formed in 1974 was in every august a home of 25-30 painters, sculptors and graphic designers. Accommodation and creation possibilities were ensured for the artists in the renewed Lazar Castle. The ancient castle of the Lázár family is situated only 200 m from the village centre and it is one of the most beautiful Transylvanian Renaissance buildings in an amazing environment. Until recently, the castle gave home to one of the Harghita County Council’s institutions: the Cultural and Artistic Centre of Szárhegy/Lázarea. The castle has been “temporarily” closed to visitors since January 2014, due to a lawsuit between the inheritors. Since the proprietary of the building changed the huge collection of artworks is now held in a warehouse. Unfortunately, that resulted in the termination of the annual gathering. Some of the artworks created there are displayed in the rebuild Council Room of the Castle.

The main aim of the Action is to create a database and a virtual gallery for the collection, that will contain all the art pieces that were once held in Lázár Castle. Because all of the art works are kept in a warehouse the possibility of seeing these masterpieces is very limited, periodical exhibitions are organized. The digital register and virtual gallery will make possible to access the general public the result of Art Camps in almost 40 years. Of course, the virtual gallery doesn’t replace the visitation of the Artworks in the environment where they were created, but it can raise awareness attracting visitors to the town. The homepage of the town of Szárhegy currently isn’t accessible and with this project it could be created connecting to the platform of the art works collection. All the artistic pieces can be part of this register which are considered the outstanding value of the artist participated in the Art Camps.

The aim of this action is to register, revitalize and promote these art values through digitizing methods with the aim to give a good local example in creating virtual galleries regionwide and to raise awareness about the value and economic importance of local Art works. The register of Art works have more expected effects:

- Conservation of the Artworks collection of the Cultural and Artistic Centre of Szárhegy/Lázarea an important component of the cultural inheritance of Harghita County.

- Ensuring open access to the virtual gallery for the general public, researchers, artists, etc. reaching multiple effect in creating new art works.

- Touristic promotion of art works in the Cultural and Artistic Centre of Szárhegy/Lázarea.
An online art gallery is a website that display artworks. Viewing art online is an improving experience. Ideally, art should appear exactly as it would if seen in the real world, but there are factors that limit the extent to which this is possible:

- Whether or not natural lighting can be approximated
- The extent to which a viewer is able to see the art from various angles i.e. other than head-on
- The impact on art that uses layering or raised effects when it is not viewable as a three-dimensional object

Activities of the action:

- Setting up the methodology of the inventory work (equipment, softwares, metadata sheets etc.)
- Acquisition of the equipment for the digitization work.
- Ensuring and train the human resources for the digitization work.
- Organizing training courses, workshops for the local stakeholders
- Choosing the appropriate online presentation: The viewer may be offered the option of zooming such that the texture or pigmentation may be examined.
- Designing the virtual gallery
- Developing a multipurpose web-page with features like:
  - blogs
  - news
  - reviews
  - events listings
  - forums
  - collaboration
  - remote accessibility

Joining the collection of the Cultural and Art Center of Lazărea to the other Virtual Art Gallery projects in the world. One of the most convenient and aesthetically stunning is Google Art Project, a bold venture that offers an ever-growing digital archive of the world’s greatest art, which you can browse wherever you are and out of which you can assemble your own personal gallery online, a fantasy collection of your favorite art.
3. **Players involved**
   - Harghita County Council as a promoter
   - Cultural and Art Center of Lăzarea as beneficiary
   - Art Association of Transylvania as partner ensuring volunteers
   - Art Gallery of the Harghita County Council
   - Pro Art Gallery
   - Art Gallery of the Csiki Szekler Museum

4. **Timeframe**
   
   2019-2020

5. **Costs**
   
   Estimated cost: 200.000 euro, maintenance: 10.000 euro/year.

6. **Funding sources:**
   - State and Structural Funds
   - Harghita County Council’s own sources,
   - Lazarea Local Authority
ACTION 8 – Living Contemporary Gallery in Harghita County

1. The background

In Harghita county exist several Art Galleries, mostly managed by public entities with the purpose to promote local Artists and without economic benefits. Therefore, the exhibitions are periodic, and it is difficult to present all details about art works with usual methods (descriptions, catalogues etc.). The SEE for Me: The “intelligent audio-guide” project presented by the University of Florence, NEMECH (“New Media for Cultural Heritage” competence center) provided us a feasible concept to overcome these problems.

The “See for Me” projects main aim was to create a smart audio guide that is cheap and flexible, adaptable to the actions and interests of visitors, and would work on any smart phone. Personalization is a key part of the project that will make museums change from “talking to the visitor” to “talking with the visitors”, thus turning a monologue to a dialogue. Digital and mobile technologies are becoming, indeed, a key factor to enhance visitors’ experiences during a museum visit. The project “See for Me” addressed the problem of creating a smart audio guide that adapts to the actions and interests of the visitor of a museum, understanding both the context of the visit and what the visitor is looking at.

The "See for Me" project is a prototype for a context-aware audio guide based on sensors in wearable devices like microphone, camera and accelerometers that can identify the artwork that is being looked at, and if the visitor is paying attention it provides the audio-guide info.

The smart audio guide, compatible with the most common Smartphones in use, perceives the data and it is able to interact with users: it performs automatic recognition of artworks, to enable a semi-automatic interaction with the wearer.

The goal of this work has been to implement a real-time computer vision system that detects the behavior of the user and can run on wearable devices to perform object classification and artwork recognition. The project was funded by the Tuscan Region resources available from the Regional Operative Program “POR CREO 2014-2020”. The system runs in real-time on a mobile device obtaining high precision artwork recognition (less than 0.3% errors on the dataset). The system was tested in the Bargello National Museum of Florence and a usability test was conducted using SUS questionnaires, obtaining a high score (~80/100). Although computer vision techniques are improving, features extraction procedure for an artwork detection is a process that takes time and needs, in order to be fine-tuned to recognize artworks and people simultaneously.

The potential concerning the knowledge/technology transfer of this practice is very high due to its easy production method as well as for the scalability of the above-mentioned solution to every kind of museum.
2. Action

The aim of the action is to digitalize the Art Gallery of Harghita County Council and other contemporary art galleries in the county displaying art work from their current, future, or past exhibitions, in order to promote the exhibitions, and help local artists to become generally known on the international art market.

For the Arts in general, communication and promotions are an important way to reach a public, the public needs to be informed in order to enjoy the product and, in this day and age, when people are spending more and more time online, the online environment seems to be the right place. For galleries this could mean using the digital media their targeted audience is using, for example, social media like Facebook and Instagram, to promote their gallery and the art. This also constitutes a change in economy of scale for the gallery practice, with specifically social media and digital mailings in mind, and with free or low cost marketing tools widely available in contrast to the often high cost print and paper advertisings and mailings.

Furthermore, the art market is overcrowded with creative products. Navigating this supply of art can be hard. For the art market the Internet has the potential of opening up the access to art overcoming the gatekeepers in the art market. In terms of the galleries’ practice, this could mean the use of their websites to showcase the artists they represent, or the art they sell, or use of other forms of digital media, like online platforms, art databases, or social media, to present the artworks, so buyers and collectors can browse through the art.

The planned action of the Harghita County Council aims to set up a modern and innovative system to access artistic or any other kind of exposition as well as to develop and introduce an audio guide system in the Art Gallery of the County Council as a pilot project.

The objectives of the action are:

- open the international market more easily for local galleries / artists
- creating a database which enables public access to all information related to actual and previous exhibitions using digitizing methods
- promotion of artists and artworks from Harghita County

Activities of the action:

- Creating a website which includes the virtual gallery
- Modernizing the Art Gallery of the County Council, establishing an audio guide system (a system of sensors, IT equipment, headset, lighting system and projection tools): The planned system would contain the current exposition as well as previous expositions. This system would also include a guiding feature that can be used with any smartphone, that would recognize the art piece and give information about it and would detect if the user is talking with someone or is watching something else at the moment.
• Continuous management of the Virtual Gallery and the audio guide system as well as online promotion of artworks. It needs at least 3 employees with different attributes (manager, technician, PR expert).

• Link the project to the Google Arts Project, which is a way of consuming and learning about the art collection of museums worldwide. Art that is out of reach on the other side of the world can be viewed from a simple computer screen anywhere where there is access to the internet.

• Online Sales platform

3. Players involved

• Art Gallery of the Harghita County Council as a promoter

• Art Association of Transylvania as partner ensuring volunteers

• Art Gallery of the Harghita County Council

• Pro Art Gallery

• Art Gallery of the Csiki Szekler Museum

• International partners

• Local firms dealing with digitalization

4. Timeframe

2019-2021

5. Costs

Estimated costs: 150.000 euro, maintenance: 100.000 euro/year

6. Funding sources:

• Harghita County Council’s own sources

• Regional Operational Programme
ACTION 9 – Digitization of literary sights, location-based stories as intangible values in Harghita county

1. The background

On December 15th it was held the fifth stakeholders’ meeting of the CD-ETA on the part of the lead partner. The participants were provided with three good practices identified as useful and applicable.

All three practices triggered heated conversations and discussions on the possibility of being developed and implemented. As most adaptive one was determined "A new and exciting way to tell location based stories".

The ToposText is a catalogized collection of ancient texts that are tagged to a mapping system showing the places relevant to the history and mythology of the ancient Greeks from the Neolithic period up to the 2nd century.

This is a mobile app and website designed to reduce the user disconnect between Greek (and broader Mediterranean) ancient cultural heritage monuments and the ancient written sources that gives those monuments relevance. Few modern travelers have extensive knowledge of ancient authors. Even experts cannot summon up the precise passages on the spot to elucidate the historical or mythological associations of the place they are standing.

Topostext is a library of 15 million words collected from ancient texts (Greek/Latin originals) in English translations, indexed against a location-aware digital map of 6,000 places including ancient settlements and monuments from Spain to the Caucasus relevant to the ancient Greek world. Selecting a site from either the list or the map opens up a table containing the relevant text or writer connected to that specific area or text. This index list can be filtered by date, genre, relevance and also connects to the full text of the work.

The beneficiaries are history and archaeology enthusiasts, researchers, students, and ordinary travellers who can have access to thousands of mythical and historical locations with one click on their smartphones. The idea belongs to Brady Kiesling, and the implementation was done by IT company Pavla AE and was supported by the Aikaterini Laskaridis Foundation.

The cost of the project was: App coding costs €35K (should be €70K, company worked for free in spare time). Data collection 4 years of unpaid work by the designer, value €120K. Data management scripts, 30 hrs volunteered by data scientist, value €4500.

This app has succeeded because it stayed simple, using off-the-shelf software, avoiding time-consuming and data-heavy visual displays & multimedia enhancements that would detract from the goal of putting primary historical sources in users' hands.

The results consists in thousands of downloads despite limited publicity, also
Winner of 2016 Digital Humanities Award for Public Engagement and growing name recognition in the Greek archaeological community, among tour guides and with Classics students.

Difficulties were encountered because of lack of machine-readable digital texts, bureaucratic suspicion of low-cost private initiatives, oppressive intellectual property fears in EU deter from offering support. There was no off-the-shelf technical solutions, and limited faith of sponsors on the user public: poorly educated on ancient cultural access.

The ToposText concept is assembling in a mobile app a critical mass of source text indexed by place names and viewable on a map interface and keyword-in-context indexes. It can be applied to any historical area/period at any scale. A local historian has already gathered most of the information required, so the job of the developer is to provide the tools and platform for organizing and sharing this data.

2. Action

Literary tourism is a type of cultural tourism that deals with places and events from fictional texts as well as the lives of their authors. This could include following the route taken by a fictional character, visiting particular place associated with a novel or a novelist, such as their home., or visiting a poet's grave. Some scholars regard literary tourism as a contemporary type of secular pilgrimage. There are also long-distance walking routes associated with writers. Literary tourists are specifically interested in how places have influenced writing and at the same time how writing has created place. In order to become a literary tourist you need only book-love and an inquisitive mindset; however, there are literary guides, literary maps, and literary tours to help you on your way. There are also many museums associated with writers, and these are usually housed in buildings associated with a writer's birth or literary career, such as their home.

While most literary tourism is focused on famous works, more modern works that are written to specifically promote tourism are called tourism fiction. Modern tourism fiction can include travel guides within the story showing readers how to visit the real places in the fictional tales. With recent technological advances in publishing, digital tourism fiction books can even allow literary tourists to follow direct links to tourism websites related to the story. This can be done on new e-reading devices like the Kindle, iPad, iPhone, smart phones, tablets, and regular desktop and laptop computers. These links within the story allow readers to instantly learn about the real places without doing their own web searches.

The action aims to set up a unified system of mapping literary sights in Harghita County. This collection includes all sights connecting to legends and literary text worthy of distinction and highlighting. All of this information will be based on written legends or other cultural text’s that can be associated with geographic data.

The planned system is a map-based platform and smartphone application that
would connect the local legends, stories, poems, or any other text with cultural value to the exact location that it is bound to. The objective of this action is promotion of the tourism potential and building of the infrastructure related to this with the aim to improve attractiveness of Romania as a tourism destination.

Specific objectives of the project are improvement, enforcement of the tourism in Harghita county through the establishment of a cultural-historic route and its promotion through various marketing activities addressed to different target groups. The project contributes to sustainable tourism development and to increase the number of the tourists that visit Harghita county and the region.

Seklerland is a marvelous place being also considered as the gate of the fairy garden leading into an enchanted journey due to its natural attractions and cultural values. In Harghita county several treasures may be discovered through the legends of this region, the stories offering an insight into the famous historical events and personalities. This project is aimed at providing help and guidance for its readers in this marvelous travel hoping that it will raise the curiosity and attention of tourists to choose our region and to visit us.

The register of values has more expected effects:

- Creating an open database with important sights of literary text and legends
- Salvation of some immaterial components of the cultural inheritance of the community of Harghita County,
- Touristic promotion of intangible heritage
- Encourages synergies among cultural heritage, local firms and tourism

Activities of the action:

- Ensuring the human resources for the action with the partnership of NGOs
- Create the institutional background of the action
- Establish the rules on the register of sites: scope, management and usage of the register etc. The purpose is to give a frame to people in order to specify and identify local values, moreover to contribute the promotion of collected values.
- Finding, organizing and correcting translated texts
- Finding and mapping the sites, Establishing accurate coordinates.

- Organizing training courses, workshops for the local stakeholders
- Developing a multipurpose web-page and smartphone application presenting the digitalized information on the values (Blogs, social network, visualization
of values using Google maps)

- Supporting local and territorial activities of digitization.

3. **Players involved**
   - Harghita County Council as a promoter
   - Visus Cultural Association
   - Local institutions, organisations as local stakeholders
   - Local Authorities
   - Local cultural NGOs
   - Association for Harghita County
   - Harghita County Heritage Conservation Center
   - Harghita County Arts Folk School
   - Harghita National Szekler Folk Ensemble
   - Pro Theatrum Fundation
   - Artera Fundation
   - Örökség Association
   - Association of Hungarian Folk Artists in Romania
   - Cultural Association of Udvarhelyszék
   - Kriza János Ethnographic Society

4. **Timeframe**
   2019-2023

5. **Costs**
   Estimated costs: 500.000 euro

6. **Funding sources:**
   - Structural Funds
   - Harghita County Council’s own sources
   - Local Authorities financial sources
   - Private sources
ACTION 10 – Digitization of Libraries and archives in Harghita

1. Background

The CD-ETA good practice used to elaborate this Action was the Biblioteca Digital Hispánica (BDH) which is an online resource of the National Library of Spain (BNE) that provides free access to thousands of documents digitized.

The problem addressed of this project is the need for preservation of bibliographic works, since their digitization reduces the face-to-face consultation and, therefore, their deterioration. The Hispanic Digital Library provides free access to thousands of digitized documents, including books printed between the 15th and 19th centuries, manuscripts, drawings, engravings, brochures, posters, photographs, maps, atlases, scores, historical press and sound recordings.

The Káromi János Library of Harghita County as the greatest public Library of Harghita County, has experiences in digitization since 2009, and the institution is interested in digitization of the cultural heritage in Harghita county.

Since 2009 the Library has digitized several issues and publications, particularly valuable items concerning local history and knowledge, some of them regarded as rarities. Beside these the county library pays big attention to the online publication of the regional-local (county relation) contents and providing services: due to the regional-local content online databases the institution disseminates the results of local history researches and helps raising awareness about regional cultural values and knowledge.

The county library disposes modern tools for digitization activities: professional scanner (it makes possible to digitize valuable, rare documents, unique writings, old books, publications in big format and photos) and suitable software.

2. Action

The long-term objective on the field of digitization of libraries is the preservation of cultural values in Harghita county, the preservation of the written and printed cultural values, and ensure the wide accessibility of cultural values. All these suppose a strong cooperation with the libraries, collections, cultural institutions in the region, and the widening of the digitization activity in line with common strategic objectives.

There are numerous tasks on the level of Harghita county, what the digitization of pre-digital age archives, church registers, local periodicals concerns. In the local warehouses, archives an enormous material is on the verge of extinction.

Regarding the digitization of the county libraries and archives the biggest obstacles are the lack of professionals and principally the lack of national strategy and coherent legal framework.

Second phase: Digitization of other local periodicals in Harghita. In this case it is important to cooperate with the local libraries in Harghita county, which own the collection of local periodicals, printings. The publishing houses are also important partners (because of the copyrights).

Expected effects: the digitization of periodicals result a significant regional archive. Numerous texts and pictures of the local social history will be accessible to everyone on the Internet. These digital texts and pictures can be linked to other activities of the CD-ETA Action Plan (for example significant number of documents will be accessible with the digital activity of the library, concerning authors from Harghita county, literally, historically sites, local stories or natural attractions etc.) All these can be linked to other actions of the Action Plan, for example to the ACTION 9 – Digitization of literary sights, location-based stories as intangible values in Harghita county.

Important premises of the action:

- Consequent national regulation
- Sustainable national digitalization strategy and guide line
- Use of international standards in terms of digital format, metadating and parameters
- Long term storage of the digital documents

3. Players involved

- Harghita County Council as a promoter
- Kájoní János Library of Harghita County
- Harghita Népe Publishing House
- Local libraries
- Church institutions
- Local Authorities
- Local cultural NGOs

4. Timeframe

2019-2023
5. **Costs**

Estimated costs: 200,000 euro

6. **Funding sources**

- Harghita County Council budget
- Possible Structural Funds
- Sources of the local authorities
- Sponsors, donations
ACTION 11 – Digitization of village museums

1. Background

In the second period of the 20th century in Transylvania (Romania) an intensive ethnographic collecting activity started, in most of the cases from local initiations which resulted numerous village museums, ethnographic and local history collections in the subsidy of county/town museums, local authorities, schools or cultural institutions and church institutions. After the transition in 1989 a second wave of museum foundation emerged. Parallel of this several professional organizations (Kriza Janos Ethnographic Society, Harghita County Heritage Conservation Center) organized conferences and workshops with the thematic of local village museums and collections.

A part of the village museums of Transylvania, ethnographic museums and local history collections have their own web-site, another part is accessible in online databases. The database of the Romanian Cultural Heritage Institution (http://cimec.ro/) contains categories such as archeology, art-architecture, written heritage, material heritage, ethnography, history, music, numismatics and theater. Furthermore, from this site is accessible the Database of Romanian Museums and Collections (http://ghidulmuzeelor.cimec.ro/sel.asp). The ethnographic database includes the ethnographic map of Romania, the virtual museum of open-air ethnographic heritage, the database of Romanian folk ornaments, the winter traditions and the folk crafts. The virtual museum (http://monumente-etnografice.cimec.ro/aeretn.htm) includes 21 constructions, parts of the collection of the open air museums in the country.

The museum database of the Kriza János Ethnografic Society has an aim to collect and organize these museums and institution in a searchable database with standardized visualization (http://www.kint.ro/muzeumtar/).

Furthermore, there are numerous touristic web-sites and databases containing information about village museums.

It is obvious that in the last years several initiations aimed to build a transparent and comprehensive information hub about the Transylvanian/Romanian (ethnographic) museums.

The digitization of the whole collection of village museums was not solved in these programs, it means that the task is to digitize this immeasurable ethnographic treasure.
2. Action
- Ensure the human resources for the action with the partnership of NGOs
- Establish the rules of the register of village museum values: scope, management and usage of the register etc. The purpose is to give a frame to people in order to digitize collections
- Organizing training courses, workshops for the local stakeholders
- Developing a multipurpose web-page and smartphone application presenting the digitalized information on the values (Blogs, social network, visualization of values using Google maps)
- Supporting local and territorial activities of digitization.

3. Players involved
- Association for Harghita County
- Harghita County Cultural Center
- Harghita County Heritage Conservation Center
- Harghita County Arts Folk School
- Visus Cultural Association
- Harghita National Szekler Folk Ensemble
- Pro Theatrum Fundation
- Artera Fundation
- Örókség Association
- Association of Hungarian Folk Artists in Romania
- Cultural Association of Udvarhelyszék
- Kriza János Ethnographic Society

4. Timeframe
2019-2023

5. Costs
Estimated costs: 200.000 euro

6. Funding sources
- Harghita County Council budget
- Possible Structural Funds
- Sources of the local authorities
- Sponsors, donations
Nr. 22224/ 21.06.2019

CĂTRE CONȘILIUL JUDEȚEAN HARGHITA
În atenția Doamnel Director General Zonda Erika

E-mail: zondaerika@harditamegye.ro

Referitor la: plan de acțiune pentru proiectul CD-ETA

Stimată Doamnă Director General,

Ca urmare a solicitării dumneavoastră din data de 19 iunie 2019, privind planul de acțiune "Digitalizarea patrimoniului natural și cultural în județul Harghita" elaborat în cadrul proiectului CD-ETA, menționăm că ADR Centru consideră pertinente propunerile cuprinse în acest plan și este de acord cu acestea. Mai menționăm că, în cazul redesciderii unul nou apel de proiecte în cadrul Priorității de Investiții 5.1 a Programului Operațional Regional 2014-2020, dedicat conservării, protecției, promovării si dezvoltării patrimoniului cultural, vom înainta către Autoritatea de Management pentru Programul Operațional Regional propunerile de modificare a condițiilor de accesare conform planului de acțiune menționat.

Vă dorim succes în activitate.

Cu stimă,
Director General
Simion Crețu
No. 22224/21.06.2019

TO: HARGHITA COUNTY COUNCIL
In the attention of: Mrs. Zonda Erika, General Director
E-mail: zondaerika@hargitamegye.ro

Subject: local action plan for CD-ETA project

Dear Mrs. General Director,

According to your request from 19 June 2019, regarding to the action plan „Digitization of natural and cultural Heritage in Harghita County”, elaborated within CD-ETA project, we would like to mention that the Regional Development Agency Center considers, that the proposals included in this plan are relevant and we agree with them. We also would like to mention that, in the case of the reopening of a new call for proposals under the Priority Axis no. 5.1, within the Regional Operational Programe 2014-2020, dedicated to the preservation, protection, promotion and development of cultural heritage, we will submit to the Managing Authority for the Regional Operational Program the proposals to modify the access conditions according to the mentioned action plan.

We wish you success in your activity.

Best regards,

General Director
Simion Crețu

Translation according to the original document
Kovács-Nagy Erika