





RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Digitalisation Department Guide of Mancomunitat de la Ribera Alta 2020, November (V2.0)

Mancomunitat de la Ribera Alta Calle Taronger, 116, Alzira. 46600 (València)

① Telephone: +34 96 241 41 42

⊠ E-mail: info@manra.org

Guide made by the Mancomunitat de la Ribera Alta © 2020



INDEX

INTR	ODUCTION	8
a)	Project Rationale	8
b) .	The Mancomunitat and the Interreg CD-Eta project	10
1.	DIGITALISATION OF THE RIBERA HERITAGE	14
1.1.	Available heritage of the Ribera Alta	14
1.1.1	. Creation of digital files	16
2.	SELECTION CRITERIA FOR ASSETS TO DIGITALIZE	17
2.1.	CRITERIA TABLE AND SCORE	19
2.2.	CALCULATION TABLE OF RELEVANCE COEFFICIENT FOR DIGITALISATION	20
3.	PROJECT RATIONALE	21
3.1.	OBJECTIVES	22
4.1.	Model	23
4.1.1	Stages in digitalisation	25
4.1.2	. Proposed formats	26
5.	SHORT TECHNICAL GUIDE TO EQUIPMENT	39
5.1.	Material	39
5.1.1	. Panoramic photos and videos	39
5.2.	METHODOLOGY. PANORAMIC CREATION	42
5.3.	Checklist for 360 photos	45
5.4.	Panoramas edition and 360 virtual tour	46
6.	DISSEMINATION EXAMPLE OF RIBERANA SITE	47
7.	STORAGE	53
7.1.	INVENTORY OF ELEMENTS IN RIBERANA	53
7.1.1	. Collection management	53
7.2.	DIGITAL HARD DRIVE	57
7.3.	NOMENCLATURE: NAMING THE FILES	58
8.	METADATA	61
9.	CONSIDERATIONS ON PRESERVATION: CHALLENGES AND OBSOLESCENCE	64
10.	CONTENT LICENSE	67
11.	DIGITALISATION AND TOURIST PROMOTION	69
12.	SOCIAL MEDIA PLAN	72
12.1.	CONTEXT	73
12.2.	STAKEHOLDERS	74
	SWOT	





RIBERANA GUIDE 2020. Mancomunitat de la Ribera

12.4.	MEDIA PLAN	77
12.5.	SCHEDULE	80
13.	COLLABORATION AGREEMENTS WITH OTHER ADMINISTRATIONS	84
14.	MEETINGS WITH REPRESENTATIVES OF THE REGIONAL GOVERNMENT	86
BIB	LIOGRAPHY	88
ANI	NEX I. Collaboration agreement model	90
ANI	NEX II. SOME PRESS PUBLICATIONS ON THE DIGITALISATION DEPARTMENT OF THE	
MA	NCOMUNITAT	93

TABLES LIST

- Table 1. Criteria for digitalisation of Heritage. Mancomunitat de la Ribera Alta
- Table 2. Example calculation of coefficients for digitalisation of assets. Mancomunitat de la Ribera Alta
- Table 3. Digitalisation techniques. MANRA Digitalisation Action Plan
- Table 4. Preservation levels of National Digital Stewardship Alliance (NDSA) (NDSA, 2013)
- Table 5. Map of Audiences, variables and necessary communication coefficient
- Table 6. SWOT of Riberana
- Table 7. Social media posts schedule





RIBERANA GUIDE 2020. Mancomunitat de la Ribera

IMAGES LIST

1.Location of the Ribera Alta	10
2.Towns of the Ribera Alta	10
3.Europeana cover. November 2020	13
4. Aledua Tower Photograph. Llombai	14
5. Digitalisation work in La Murta. July 2019	24
6.Digitalisation work at the MUMA museum in Alzira. February 2020	25
7. Spherical photograph of "L'Apostolat" showroom, MUMA Alzira	26
8.Screenshot route - Virtual visit in Museu Valencià of Festa de Algemesí	28
9.Screenshot route - virtual visit in the natural area of La Murta (Alzira)	29
10. 360 video frame screenshot – Cycle route Antic Trenet of La Ribera	30
11. Video of the interview on oral heritage to neighbours of Montserrat, to Arxiu de la	Paraula Viva
Riberana section	31
12. Self-portrait detail photograph of the painter Teodoro Andreu. MUMA	32
13. Screenshot 3D Sketchfab viewer- Alédua Llombai Tower	33
14. Screenshot 3D Sketchfab viewer– Doménec Gamieta Sculpture – Museu Valencià de	e la Festa de
Algemesí	33
15. Screenshot of images to obtain 3D model sculpture of Leonardo Borrás	34
16. 3D printing of the Ribera Arab towers- Introduction of the MUMA Virtual Visit Octo	ber 202035
17. Turn-page on-website— bibliographic heritage	36
18. Bibliographic heritage website space - multimedia elements	37
19. Interactive map (Google Maps) with digitalized elements - Riberana	38
20. EOSM50 camera	39
21. GoPro Max 360 Camera	39
22. Preparation of the scanning work with 360 panoramic	42
23. Rotating tripod head for 360 panoramas	43
24. 360 photography planning	
25. Viewing photos in file browser	44
26. Card to mark 360 photo sets	44
27. 360 photo editing with stitching software	46
28. Virtual visit example	46
29. Front page Riberana.es	47







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

30. Time comparison of photographs	50
31. Example of the storage structure by categories	56
32. Riberana virtual hard drive	58
33. File distribution by format	59
34 Recreation of La Murta monastery. Sketchfab	69
35 Scale models obtained with 3D printing	70
36. ICT integration in tourism promotion	71
37. Riberana's Facebook	77
38. Riberana's Twitter	78
39. Riberana's Instagram	78
40. Riberana's Youtube	79
41. Schedule - Road Map 6 months with Trello	81
42. Signature of the agreement for digitalisation between the Mancomunitat de la Ribera Alta and	d
the town council of Alzira	84
43. Meeting of the President of the Mancomunitat, Txema Peláez, with the Deputy Director of	
Heritage , Antoni Bravo, and the ethnology technician of the General Directorate of Culture and	
Heritage of Generalitat Valenciana	86
44 Meeting of the Mancomunitat with Jordi Juan, secretary of innovation and digital transformati	ion 87
45. Levante EMV 07.05.2020	93
46. Levante EMV 12.07.2020	94
47. Àpunt Website28.01.2020	95
48. Tot Alzira 13.02.2020	96
49. Las Provincias. 15.02.2020	97
50. Web de Àpunt 01.02.2020	98
51. Las Provincias 29.01.2020	99
52. El Seis Doble. 05.04.2020	100
53. El Seis Doble. 22.10.2020	101
54. Las Provincias. 22.10.2020	102
55. Ribera Express. 22.10.2020	103







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

INTRODUCTION

a) Project Rationale

Every territory is made up of different heritage resources, whether cultural, environmental, landscape or anthropological and, therefore, has a cultural and historical value. This statement is key to the approach to the study and dissemination of local heritage. It was one of the starting points for the presentation of the Visions of Cultural Heritage conference, held at the Faculty of Geography and History of the University of Valencia by the professor of the Department of Prehistory, Archeology and Ancient History, of the University of Valencia, José Luis Jiménez Salvador.

Heritage has a close relationship with its environment and we could consider it a key piece in shaping its identity. It is also a value, which strengthens its territory not only from an economic point of view and as a tourist attraction, but above all a strategic one: involving the management of resources, investments, communication policies and innovation.

In the case of the Ribera de Xúquer, heritage has an outstanding importance in shaping the regional identity and in the stimulation of the municipalities that make it up, associated with the Mancomunitat de la Ribera Alta. This local entity groups together all the municipalities of the region, managing different joint services, among which the digitalisation of cultural and natural heritage is one of them. The protection, promotion and enhancement of the unique heritage elements of the Ribera de Xúquer is among the objectives set forth in the statutes of creation of the Mancomunitat de la Ribera Alta. For this reason, work will be done to enhance heritage and contribute to the strengthening of its identity value and to promote tourism and the economy. The heritage of the Ribera Alta keeps a series of similarities between the different municipalities that comprise it. Undoubtedly, its uniqueness is a cultural, economic and social value whose enhancement is, without a doubt, the responsibility of public administrations.

Local heritage has a growing interest in its protection and dissemination. According to the article 25.2 of Law 7/1985 regulating the Bases of Local Regime, among the competencies of local administrations are the promotion of culture and the management of historical heritage. Undoubtedly, local heritage awakens a growing interest in its protection and dissemination.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

For all these reasons, the Mancomunitat de la Ribera Alta promoted the creation of a digitalisation department in the Mancomunitat de la Ribera Alta seeking to contribute to the preservation and digitalisation of heritage. This department makes it possible to contribute to the dissemination and preservation of heritage in a permanent, continuous, and coordinated way from the public administration itself, both local and regional, taking advantage of previous experience and transferring the knowledge acquired during the study and digitalisation process.

The experience in the development of the department and the work derived from it opens a path that will allow expanding this type of experience, helping other entities to take advantage of the knowledge, the development of their organizational and work structure. And also the results, in order to use them in an open and organized way for informative, academic and also tourist and economic promotion purposes in the different territories that host the rich natural and cultural heritage.

The purpose of this guide is to document the work of organization, digitalisation, preservation and dissemination of the natural and cultural heritage initiated by the Mancomunitat and to facilitate its replication in other territorial contexts. The regional entity promoted the creation of the department for the digitalisation of natural and cultural heritage, the work and development of which is reflected in this guide *Riberana: start-up and operation of a service for the digitalisation of natural and cultural heritage*. This guide is a sample of the work carried out from the start-up of the department to the completion of the Interreg Europe CD-Eta project and makes a forecast of the future of its development during the following years, in which the work carried out continues and therefore, it continues to grow.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

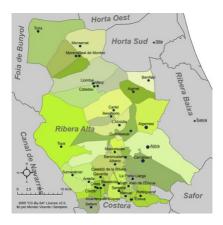
b) La Mancomunitat and the Interreg CD-Eta project







1. Location of the Ribera Alta



2. Towns of the Ribera Alta

La Ribera Alta is made up of 35 municipalities that group a population of more than 220,000 inhabitants, distributed in a territory of 979.5 km². The region is made up of small municipalities (less than 5,000 inhabitants) with some more populated towns (Alzira, 45,000; Algemesí, 28,000; Carcaixent, 20,000; etc.). The Ribera Alta Mancomunitat groups together all the municipalities and smaller local entities of the Ribera Alta region.

The Mancomunitat manages different services that are of interest to the municipalities that comprise it, constituting a regional entity where the debate and management of those issues that affect the towns of the Ribera Alta region are possible. The Mancomunitat is in charge of the following actions:

- Promote services that seek to improve the well-being of the entire population.
- Promote actions before public and private institutions and entities aimed at improving services.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

- Participate, organize and collaborate in regional events and in those whose objective is to make the region known.
- Cooperate, participate and promote the dissemination of study material from our region written in our language.

The Mancomunitat is the regional entity best adapted to promote initiatives and form part of certain European programs aimed primarily at the Ribera region.

To develop its activities, the Mancomunitat receives contributions from its municipalities and subsidies from different public bodies. The Plenary of the Mancomunitat is the highest governing and administrative body of the Mancomunitat and is made up of the members representing the member municipalities (all mayors and a certain number of councilors from each municipality). The Presidency, the Vice Presidencies, the Governing Board and various informative commissions complete the governing bodies of the Mancomunitat de la Ribera Alta.

On October 10, 2018, the Plenary of the Mancomunitat de la Ribera Alta (35 municipalities), in a plenary session meeting in Turís, officially approved the creation of the Department of Digitalisation of the Cultural and Natural Heritage of the Ribera Alta. With its official approval, the future sustainability of the CD-Eta project is guaranteed, as a private department that has been created as a permanent resource, with specific internal regulations for its activity. The origin of the creation of this department is found in the participation of the Mancomunitat in the European project Interreg-Europe CD-Eta, whose objective is "to accelerate the adoption of a culture of digitalisation of heritage".

CD-Eta project recognizes the importance of digitalisation and digital technologies in economic development but that "most of the natural and cultural values that are unique or that can be seen in one place, are not yet subject to digitalisation, and this makes access difficult for the general public". Therefore, it is proposed to improve the policy of digitalisation of natural and cultural heritage, with a common cooperation work plan at the interregional level. The purpose was to establish uniform standards in the massive digitalisation of natural and cultural heritage.

According to the experiences shared between the different partners that make up the project (Santa María La Real Foundation (Aguilar de Campoo, Palencia), Estonian War Museum (Estonia), BSC Kranj (Slovenia), Department of Natural and Environmental Resources Management of the University of Patras (Greece), Harghita regional government (Romania), the Pleven-Olt Euroregion (Bulgaria) and the Florence Foundation for Research and Innovation (Italy).







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

The creation of a department in charge of classifying, digitizing, indexing, and launching a repository for consultation and dissemination of digital elements and their stimulation as part of the regional heritage was proposed. The creation of the new digitalisation department was approved by the Plenary of the Mancomunitat de la Ribera Alta in October 2018.

Classification and fieldwork began in May 2019, and subsequent digitalisation. The first published digital objects were presented in January 2020 through the Riberana web project, which includes in a single digital space all the heritage objects digitized by the Mancomunitat de la Ribera Alta. The website includes these first digitalisation works (360 videos, 3D models, virtual visits) classified according to a heritage typology (natural, architectural, bibliographic, intangible heritage and museums), with objects grouped in cards according to the element to which they belong and connected between yes, and allowing free and public access and use.

Preservation. Challenges and opportunities

Heritage management (both natural and cultural) has a deep commitment to preservation. In fact, the physical heritage faces different risks regarding its deterioration: passage of time, natural external aggressions, chemical agents, pollution, the action of human beings, the loss of intangible heritage that has not been fixed and registered, etc. Digitized heritage also faces a series of attacks that can lead to the loss of said heritage. The purpose of digital preservation is to help establish this heritage, conserve it effectively for different uses, both present and future, and contribute to its dissemination. Telematics access to the digital copy of the property universalizes its access (it is unlimited and timeless, and expands the possibilities of cultural access beyond geographical, economic or social limitations) and puts the heritage within the reach of the citizenry, which is to whom it belongs. For this dissemination to be possible over time, it is necessary to have an effective application of a protocol for preservation, control and management of duplicates ... resulting is an arduous task and a major challenge for managers of collections, both physical and digital.

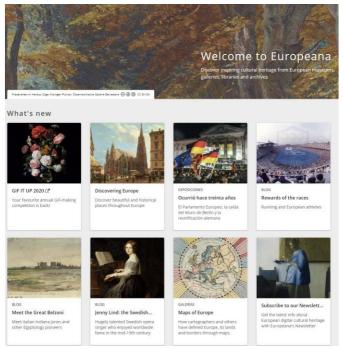
Regarding dissemination, both universal and academic, we find different cases of success at the national and international level regarding the digitalisation and cataloging of heritage. This is the case of digitalisation projects for large museums and collections, and experiences of digital cultural aggregators such as Europeana (pan-European cultural aggregator project), Hispana or Mexicana.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



3. Europeana frontpage. November 2020

Europeana is the reference aggregator in Europe, with thousands of files, to share cultural heritage, for educational, research or simple enjoyment purposes. It has access to more than 50 million digitized files. Europeana's mission is to strengthen the cultural heritage sector in its digital transformation process.

Covid-19 context

The restrictions derived from the pandemic caused by covid-19 forced a home confinement of the population during the spring of 2020. During that time, the cultural offer sought to respond in the online space to the demands of the population and, in turn, contribute to making a difficult moment more bearable. In the case of cultural and museum offerings, the prior digitalisation and publication of the *Museu Valencià de la Festa* through a cultural visit resulted in a tripling of online visitors, while the museums had to remain physically closed.

The virtual visits and their dissemination and promotion through social networks resulted in a greater knowledge of the heritage, encouraging the population to know its cultural offer.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

1. DIGITALISATION OF THE RIBERA HERITAGE

1.1. Available heritage of the Ribera Alta

In the first phase of the department's work, a search was carried out for the heritage elements existing in the region in accordance with their cataloging and legal protection. One of the sources of consultation was the General inventory of Valencian Cultural Heritage, of the Ministry of Culture, General Directorate of Heritage and Museums, where the PCI (Properties of Cultural Interest) and PLR (Properties of Local Relevance) are incorporated, in addition to movable assets of heritage relevance and intangible assets of local relevance. The search can be carried out through municipalities and regions. At the beginning of the project, a total of 68 PCI and 265 PLR were located in Ribera Alta.

A Properties of Cultural Interest (PCI) are a figure of special protection, regulated by Law 16/1985, of June 25, of the Spanish Historical Heritage. According to its text, "a BIC is any property and movable object of artistic, historical, paleontological, archaeological, ethnographic, scientific or technical interest, which has been declared as such by the competent administration". Documentary and bibliographic heritage, archaeological sites and areas, as well as natural sites, gardens and parks, that have artistic, historical or anthropological value, can be declared as PCI. Furthermore, Law 4/1998, of June 11, regulates Valencian cultural heritage Valencian cultural heritage.



4. Aledua Tower Photograph. Llombai







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

The following categories are included in the classification of Property of Cultural Interest: monuments (architectural heritage and great sculpture), historic gardens, historic sites, historic sites, archaeological sites. The process of including an element in the BIC catalog of Spain requires the initiation of a file and the legal approval of the Consell (Valencian Community). In some cases, BIC declarations are of a general nature, such as castles and ruins.

The PCI declaration implies the consideration of the property as "public domain", although it can maintain the private nature of the property in some cases. The PCI requires authorization for modifications and the owner must facilitate the inspection, visit and research, in addition to being a beneficiary of aid for restoration, conservation ... and may be subject to state subsidies for its protection.

According to the list of protected elements with the names of PCI and PLR, we find in the Ribera Alta region, predominantly, material heritage (tangible). The presence of intangible and popular heritage is testimonial, despite its relevance from the ethnographic point of view. The department will try to give more space to this type of elements (customs, displays of popular heritage) despite having less presence in the cultural heritage catalogs. Two outstanding examples are the dialect richness collected in the compilation "Les veus d'una Ribera", by Enric Ramiro, and the oral memory of the elderly found in "Arxius de la Paraula" elaborated by the Montserrat city council, its archive municipality and the office for the promotion of the Valencian language of Montserrat.

Natural heritage also has a categorization that defines and requires its protection, such as the PNM (Municipal Natural Area), ZEPA (Special Bird Protection Zone), LIC (Websiteof Community Interest), ZEC (Zone of Special Conservation), ZH (Humid Zone), PN (Natural Area) or Mcr (Micro-reserve). The digitalisation and interpretation of this type of environment, through different digital objects such as virtual visits, 360 videos and interactive apps, contribute to the dissemination and awareness of the importance of this type of environment, the need to preserve and know them. Through digitalisation, different perspectives, information and content can be included that help preserve this type of heritage.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

1.1.1. Creation of digital files

Taking images and digitizing content will result in a set of elements, in different formats and resolutions, depending on the purpose of preservation or dissemination. It will be necessary to define quality, weight and format standards in both cases, defined in a procedure manual. For preservation, a storage strategy will be necessary in different locations, including an online hard drive, and consultation, including an online platform or repository. The repository of texts, videos, photographs and 3D elements must be indexed in a detailed way by means of an optimal metadata tagging, of which more details are given in this guide. (Section 7).

First, for the preservation of digital copies it will be essential:

- Define and choose the format and quality for its conservation.
- Establish a duplicate storage strategy and regular backups.
- Detailed and standardized indexing for location and recovery of elements.

Second, in parallel to preservation, the dissemination of content will be another of the department's tasks. For this, the format, quality and weight suitable for dissemination both on the website and on social networks must be defined.

The content dissemination strategy is defined in the social media plan (<u>social media plan</u>), detailed at the end of this guide. More detailed information in the procedure manual and required training. Its ultimate objective is to make the digitized heritage available to all of society and increase the interest and prestige of the Riberana platform.

The resulting digital files will have the purpose of facilitating access by studies, the general public, potential tourists and people interested in the region, which also makes this file a tool to be used in different tourism promotion campaigns and economic empowerment of the area.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

2. SELECTION CRITERIA FOR ASSETS TO DIGITALIZE

There is a large number of cultural and natural assets as part of the cultural and natural heritage and it is desirable that they be digitized. It involves a large number of actions, some of which will require a review and update from time to time. Therefore, it is necessary to decide objectively which objects will be digitized first, which ones will follow, and which heritage elements can be added to this list and with what priority. To follow a series of criteria of relevance, protection, tourist interest and vulnerability, for the choice of the goods to be digitized, establishing some criteria, including also those intangible goods and popular heritage with less presence in collections and catalogs is proposed to fix their order, priority and assign the limited human and technical resources.

The catalog must have a variety of elements by categories and locations, and municipalities involved to achieve a regional and integrating dimension. It will be necessary to prioritize the degree of protection, and include elements related to those that already exist (that are part of the same set, geographic location, share authorship or construction technique, for example) and be able to have extensive contextual information. It will be a priority to have a varied catalog in terms of origin, dating, location, construction technique, etc., and finally, priority will be given to those elements for which there is availability of documentary sources, for which collaboration with other institutions will be necessary (local, regional and central administration).

Given the need to define the criteria for digitalisation, because technical and human resources are limited, while the potentially digitizable heritage is not, and to establish the order in which they will be digitized, the following **TABLE OF THE RELEVANCE COEFFICIENT FOR DIGITALISATION** is proposed. The Department of Digitalisation of the Mancomunitat de la Ribera Alta makes this Table available to calculate a coefficient of objective relevance. It is a proposal to calculate the relevance of each element with the sole purpose of organizing existing resources and to schedule their production.

Description:

A series of categories is established that will give each element a score between 3 and 0 points, according to a series of criteria, established in Table 2.2 (criteria and score). The proposed categories are the degree of protection already existing, tourist interest, the vulnerability of the property (digitalisation for the preservation of a fragile digital object), the geographic scope of relevance of the property, the availability of existing information sources that expedite the work of documentation and contextualization of the property and the existing demand.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

According to the number of categories proposed, the maximum score would be 18 points. With the proposed formula, this score would be equal to 10 out of 10. The objective is to facilitate the comparison between different elements and thus organize the digitalisation work schedule. For example, the Torres Árabes project obtains a high score (9.33) because it has the highest degree of protection (Property of Cultural Interest PCI) and it has great tourist interest (tourist routes, programs in tour of these towers, cycling routes, etc.). Their degree of vulnerability is medium (some of them require urgent actions, others have been totally or partially restored), involves more than five municipalities in the region, there are different studies available on their context and construction, and there is a high demand and interest from society.

On the next page, you can consult the table of values, and an example of scores of about 20 elements, available on the Riberana website, and their corresponding relevance coefficient.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

2.1. CRITERIA TABLE AND SCORE

	PROPERTY OF HERITAGE	SCORE
	PCI or equivalent	3
DDOTECTION DECDEE	BRL	2
PROTECTION DEGREE	Included in the municipality's catalog	1
	Others	0,5
	SCORE (Max. 3, min. 0,5)	
	Featured national or regional promotion	3
	Local tourist attraction pole	2
TOURISTIC INTEREST	Included in guides	1
	Singularity	0,5
	SCORE (Max. 3, min. 0,5)	
	Ruin or imminent risk of destruction	3
	Very deteriorated, risk of disappearance <5 years	2
VULNERABILITY	Damaged parts / temporary work	1
	Others	0,5
	SCORE (Max. 3, min. 0,5)	
	4 or more municipalities	3
	3 or more municipalities	2
LOCAL	2 municipalities	1
	1 municipality	0,5
	SCORE (Max. 3, min. 0,5)	
	Detailed documentation and agreement with local administration	3
	Collaboration and available sources	2
AVAILABLE SOURCES	Available sources, previous works	1
	Reviews	0,5
	SCORE (Max. 3, min. 0,5)	
	General interest Highlighted local (publications)	3
	Special local relevance	2
DEMAND	Collective involved in dissemination	1
	Others	0,5
	SCORE (Max. 3, min. 0,5)	

Table 1. Criteria for digitalisation of Heritage. Mancomunitat de la Ribera Alta







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

2.2.CALCULATION TABLE OF RELEVANCE COEFFICIENT FOR DIGITALISATION

	CRITERIA (3 - 1)						
	PROTECTION	TOURISTIC INTEREST	VULNERABLE	LOCAL	SOURCES	DEMAND	
Archeolog ical							OUTCOME:
Torres Árabes	3	3	2	3	3	3	9,33
Pont del Rei	2	3	2	0,5	3	3	7,67
Bibliographic							
Ribera Imatge i Territori	3	3	0,5	3	3	3	8,33
Història Manuel	3	2	3	0,5	3	2	7,00
Museums							
Museu Festa	3	3	3	0,5	3	3	8,33
MUMA	2	2	3	0,5	3	2	7,00
Natural							
PNM Murta	3	3	2	0,5	3	3	7,67
PNM Salines	3	2	1	0,5	3	2	5,67
Rupestre Tous	3	3	3	0,5	3	3	8,33
Vía Verda Trenet	3	3	2	1	3	3	8,00
Inmaterial					T	T	
Arxiu paraula	3	2	3	0,5	3	2	7,00
Veus Ribera	3	3	3	3	2	1	8,00

Table 2. calculation example of coefficients for digitalisation of assets. Mancomunitat de la Ribera Alta







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

3. PROJECT RATIONALE

Field of competence

The Mancomunitat de la Ribera Alta, as a regional entity that includes all its municipalities and smaller local entities, is considered the ideal institution to carry out this project, and to coordinate the digitalisation of the cultural and natural heritage of the Ribera Alta de Xúquer. It allows unifying efforts and experiences and taking advantage of the operation of the service to benefit the maximum number of citizens. It should be noted that the Mancomunitat de la Ribera Alta has experience in publishing regional publications, cultural guides and natural spaces, history and heritage and that there is an implication throughout the institution regarding their conservation.

In the Ribera Alta region, there are many shared elements and patrimonial, cultural and historical features, which are common in the municipalities that make it up, which recommend integration into common collections. In the regulatory laws of the Mancomunitat de la Ribera Alta (article 6), among the purposes of the regional entity, the following are included:

- Protection and management of historical heritage.
- Promotion of culture and cultural facilities
- Information and promotion of tourist activity of interest and local scope

Therefore, the implementation of a heritage digitalisation service as a preservation tool fulfills the functions set out in the aforementioned statutes of creation of the regional entity, including cultural promotion. In its statutes, in article 4, it is also highlighted that "the Mancomunitat de la Ribera Alta has as its objective the defense and promotion of the common interests of the municipalities that comprise it", being the promotion and defense of the natural and cultural heritage own one of these interests.

This service is possible thanks to the collaboration with departments of culture, heritage, tourism or environment of different municipalities, in addition to the collaboration of other administrations both in the management aspect and in the financing of projects. It is also important to support and enhance the heritage of the less populated municipalities (22 of the municipalities of the Ribera Alta have less than 3,000 inhabitants), which would not have a sufficient autonomous structure to carry out their own digitalisation projects. Therefore, digitalisation for dissemination and preservation purposes is one of the relevant purposes of the Mancomunitat de la Ribera Alta.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

3.1. OBJECTIVES

Generals

- Enhance the heritage of the Ribera Alta.
- Improve universal and telematics access to the cultural and natural heritage of the Ribera Alta.
- Accelerate the adoption of a culture of digitalisation of heritage.
- Preserve those assets of greater fragility (oral, bibliographic heritage, archaeological assets at risk ...) digitally.

Specific

- Creation of a website for consultation and dissemination, with digital objects with a license for free use of Creative Commons 4.0 (BY SA NC) and 3.0 rights.
- Preservation (true and quality copy of the resulting patrimonial elements) of these elements.
- Establish and link metadata indexing and tagging method compatible with European standards.
- Disseminate natural and cultural heritage through our own digital media and those of third parties.
- Put the Riberana and the Mancomunitat de la Ribera Alta brand in terms of the dissemination of Heritage.
- Expand the possible applications as a heritage dissemination tool: 3D printing, time comparisons, dissemination campaigns, monographs, etc.
- Establish a constant relationship with other institutions involved in the management and protection of heritage such as museums, universities, town halls, and councils ...
- Scalability: export the creation model of the Department of Digitalisation to other associations and municipalities.
- Continuous training and improvement of the department's digitalisation capabilities.
- Inclusion and updating of new techniques for capturing and processing information for dissemination or preservation purposes, which may appear in the future.
- Analyze the work, learning and digitalisation techniques, developing different tools to share the knowledge acquired, such as this guide, with other associations and local entities and achieve generalized involvement of local administrations in the digitalisation of their heritage.

4. METHODS

4.1. Model







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

The methodology proposed in the following guide for the operation of the digitalisation department seeks to provide agility, flexibility and rapid adaptation to short delivery cycles, adjusted to the local environment and through sources of financing with own funds. For the execution of the digitation of the Ribera Alta Heritage project, work will be done in a multidisciplinary way, with a team coordinated by a project manager. Among the departments that are part of the project are computer science (document management, resources, hardware and software acquisition), archives (bibliographic heritage management), tourism (natural and cultural heritage documentation), administration (permits, budgets), European projects (documentation and strategy), finance department and management.

In the first phase, a certain number of pilot projects will be planned and executed (one is recommended for each category: natural, architectural, bibliographic, intangible and museum heritage), to thus work on the adaptation and setting of the working method and formats of publication. The work will be divided into three delimited phases: planning, execution and monitoring. The monitoring phase includes the task of dissemination and preservation.

Before planning the pilot projects, a search will be carried out and a list of their own local heritage will be drawn up. This list, which will be submitted to the relevance coefficient calculation proposed in this guide, will be documented using word processing programs and tables. It will be updated periodically. After this selection, the five pilot elements are chosen (one per category) and the techniques to be used are defined. The use of the resource of virtual visits composed of panoramic photography for the museum and the natural route, the use of video for intangible heritage, the realization of interactive elements for bibliographic heritage and 3D photogrammetry for architectural and archaeological heritage is proposed.

To screenshot images and post-production, it will be necessary to stock up with a series of devices (software and hardware), in addition to the complementary training necessary for the use of different techniques (panoramic photography, photogrammetry, photographic editing and video ...)







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Finally, a tagging metadata classification of the elements is established, with which they will be added and stored in the web repository, where all the objects resulting from the department's digitalisation work will be housed, and that will be necessary for the operation and efficiency of the repository.



Digitalisation work in La Murta. July 2019

There are a large number of cultural and natural assets as part of the heritage and that should be digitized. To establish the order, priority and assign the limited human and technical resources, it is proposed to follow a series of criteria of relevance, protection, tourist interest and vulnerability, for the choice of the assets to be digitized.

For the screenshot of images and post-production, a series of devices (software and hardware) detailed in this guide will be necessary (<u>TECHNICAL EQUIPMENT GUIDE</u>).







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

5.1.1. Stages in digitalisation

For the digitalisation of each element, the following steps are proposed:



6. Digitalisation work at the MUMA museum in Alzira. February 2020

- 1. Documentation. Contextual information. Study and digitalisation of the collection catalog.
- 2. Planning the process (calendar, resources, and premises to be processed).
- 3. Decision on the parts to be digitized, techniques used and special equipment, such as lights, photogrammetry, arrangement of elements...
- 4. Previous fieldwork: beta digitalisation at low resolution. Checklist with necessary material, revision...
- 5. High quality digitalisation.
- 6. Organization, indexing and storage of the resulting gross.
- 7. Creation of the project. Editing of the material and post-production of images.
- 8. Export in different formats, resolutions. Sending and capturing inputs by the stakeholders or agents involved (cultural managers, management, city councils, etc.)
- 9. Final product. Version control.
- 10. Metadata indexing, by categories. Mixed metadata insertion (automated and manual), inclusion of metadata by categories.
- 11. Storage of copies for preservation and copies for dissemination on the web portal (Riberana), links and codes, or digital copies for third-party spaces (web, online newspapers, blogs, collaborators ...)
- 12. Versions for social networks. Dissemination calendar in accordance with the communication plan strategy). Publication. Calendar and recommendations in this guide. Programming on different platforms.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

6.1.1. Proposed formats

Panoramas and photospheric images

W D





7. Spherical photograph of "L'Apostolat", MUMA Alzira

RIBERANA Copyright CC 4.0

This category includes panoramic photographs, 360 photographs, spherical photographs, omnioramas... It is a single image composed of several photographs that allows the viewer to navigate within the image (90 $^{\circ}$, 180 $^{\circ}$, 360 $^{\circ}$ rotation).

Provides more information about the environment and the context of the image. From the viewer's point of view, it perceives greater realism and allows interactivity (being able to move, according to their choice, in different directions within the image). The observer is in the center of the image.

There are different techniques for the realization of these panoramic, photospheric and omniorama images. There are some compact 360 -photo cameras (increasingly popular omnidirectional cameras), that use two opposing very wide-angle fisheye lenses. These cameras generate two hemispherical images that are presented together. Another different technique in its execution and result is the multi-shot technique with a panoramic head for tripod. These images must subsequently undergo a post-production process and put into a single image







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

The result is the viewing of an image with 360 ° travel on its horizontal axis, and 180 ° or 360 ° on its vertical axis. The zenith and nadir planes are incorporated into photospheric photography. This type of images can be integrated into a virtual tour (through virtual tour editing software, which will be described below).

A 360 -image viewer is required. For example, this option is available in the Facebook social network, in Ptgui Viewer and in other native image view software of different operating systems, in addition to being able to be integrated into applications such as Google Maps, which allows users to share panoramic photos and spherical with geographic location, integrated into your maps.

These images can be consumed by the viewer on a computer, and on mobile phones or tablets, with the use of the gyroscope that allows the perspective of the image to be moved by rotating the device. Special mention deserves the integration in virtual reality glasses or helmets. These are dissemination tools, which are becoming popular due to the increasingly affordable prices of technology and equipment, as well as improvements in the quality and processes of image creation. It allows a feeling of immersion for the viewer, and a greater degree of interactivity.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Virtual visit



8. Screenshot of route - Virtual visit in Museu Valencià of Festa de Algemesí

To carry out virtual visits, it is necessary to have specific software that allows the edition and subsequent publication of the proposed interactive virtual tours.

In this case, it is proposed to create virtual tours that will be interactive because the viewer can navigate within the panorama, move to other panoramas that are part of the tour, and open multimedia elements (texts, detailed images, videos, 3D) included as points of interest in its 360 panoramic views.

For the editing of the panoramic photographs described in the previous point, the use of panoramic image stitching programs such as **PtGui**, is proposed, for example, although we could also compose a Virtual visit using photographs obtained by a compact 360 camera. For the edition of the Virtual visit, its connections, the inclusion of interactive points that make it up (photographs, videos, texts) and even certain image retouching, the use of a Virtual Tour editing software is proposed, such as example **Pano2VR**.

In addition to integrating maps, menus, interactive points, the panoramas present in the virtual tour can also be integrated into Google map systems (Google Maps) by geolocation of these images through their metadata. The geolocation can be edited manually or integrated into the process of capturing images through the digital camera (the GPS system of the same must be activated).







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

The proposed Virtual visit will be published through a web app, and offers potential uses with the integration of viewing on mobile devices and virtual reality glasses (VR). This type of device allow easily interact with any of the elements that are visible on the route, such as a text box, open a photo, play a video, view a 3D element in an integrated viewer, etc. Another interesting application, in the case of virtual visits, is to be able to see the same panorama taken in different seasons or times of the year to appreciate the changes in the color of the leaves, landscape and fruits that the natural path offers.



9. Screenshot route - virtual visit in the natural area of La Murta (Alzira)

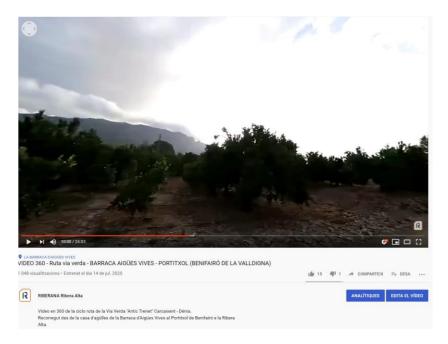






RIBERANA GUIDE 2020. Mancomunitat de la Ribera

• 360 ° videos



10. 360 video frame screenshot – Cycle route Antic Trenet de la Ribera

The use of compact sports cameras for 360 video recording offers great possibilities from the point of view of digitalisation. It allows presenting a tour of a space on which the viewer can navigate in 360 degrees, increasing the degree of realism, in addition to integration with mobile systems (gyroscope technology) and VR equipment (virtual reality). Unlike the Virtual visit, the result is a tour of a moving scene, on which the viewer can change the orientation of the point of view, in a linear time course.

It is recommended to use supports such as tripods, or helmets, to hide the camera operator. Recording can be done in real time, or configure timelapse or timewarp techniques (recommended for very long runs, to optimize resources such as battery or storage capacity during recording). Most compact sports cameras allow you to set the maximum length of each recording video clip, dividing it into several files.

For viewing, the YouTube platform allows to integrate easily 360-videos, allowing an immersive experience to share and disseminate by the viewer very easily. It can also be integrated into VR virtual reality systems such as Oculus or Card Board glasses, using a mobile device (although the conversion of the image into a signal for the left and right eyes is done artificially).







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Videos



11. Video of the interview on oral heritage to neighbors of Montserrat, of Arxiu de la Paraula Viva Riberana section

Video is a prominent element in digitalisation for both dissemination and preservation of physical or immaterial content. It has been the means used for the digitalisation of different interviews with older people, who relate the very different way of life of the mid-20th century, in addition to collecting in their interviews the lexical and dialect wealth of their generation. In the case of Riberana and in collaboration with the municipality of Montserrat, the *Arxius de la Paraula Viva* project was launched with different interviews with older people in the town.

The editing of videos and interviews will be stored in the digital repository, in a short version (edited), and it is also recommended to store a complete version of the interview to make it available to philologists, journalists, historians and other researchers interested in this content.

It is proposed to use the YouTube platform for its dissemination because it allows sharing in an agile way, embedding the content in web spaces, positioning the content in its internal search engine and in Google, in addition to having editing options such as the insertion of subtitles, which can be very useful in some type of content. Other spaces for disseminating this type of content are other social networks, such as Twitter or Facebook, which are giving great importance to their content. It is recommended to save different versions of the work, for future applications, and in different formats and to observe the general recommendations regarding digital preservation.

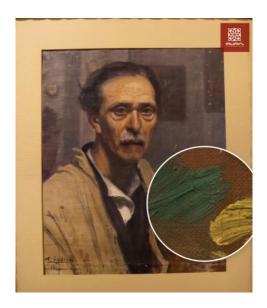






RIBERANA GUIDE 2020. Mancomunitat de la Ribera

• Detail photographs



12. Self-portrait detail photograph of the painter Teodoro Andreu. MUMA

A dissemination and interpretation tool integrated in a site-web server is proposed, which allows zooming in on the image with the simulation of a magnifying glass, in order to see details of the image, such as the stroke of oil on a painting. This allows you to explore the element, discover fragments and nuances. Applicable to painting, sculptures, handicrafts, cave paintings, among other outstanding elements.

To achieve these elements, different aspects must be taken in account when taking photographs, such as the level of resolution and definition of the image and lighting, as well as other optimization tools such as "color checker" charts, and establish a protocol in the capture, to guarantee the preservation of the information obtained from the digitized object.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

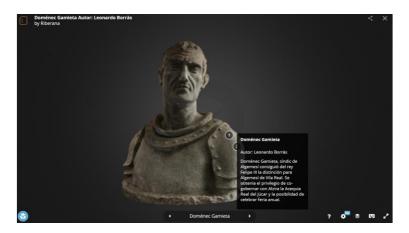
• Photogrammetry and 3D elements



13. Screenshot 3D Sketchfab viewer- Alédua Llombai Tower

Another interesting element for digitalisation work is 3D objects they are reproductions of physical elements that allow navigation in 3D dimensions through a viewer. In recent years, this technology has managed to become popular thanks to the increase in the capacity of domestic computing elements, and the development of *software* that facilitates their creation.

Techniques such as photogrammetry are used in order to create a 3D object from a physical object, composing the object to be reproduced through different images and perspectives. The result will be a 3D model, which can be disseminated and shared through Sketchfab: a 3D viewer that has seen great growth in recent years. Either through the website or the mobile app, it allows you to view and share 3D content online.



14. Screenshot 3D Sketchfab viewer- Doménec Gamieta Sculpture - Museu Valencià de la Festa de Algemesí







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Sketchfab provides a 3D model viewer based on WebGL technology that allows you to reproduce 3D models. Among the possibilities it has, it allows you to put it on third-party websites. It has perspective, orientation, lighting editing possibilities, and the author can include information about the digitized object through hotspots. These interactive points can be informative texts, but also links to websites, videos, and photographs.

In the case of small objects such as statues, shields, panels ... it is possible to digitize them in 3D using terrestrial photographs, with the appropriate training. In the Riberana project, the largest projects were carried out by means of a tender. These are towers more than 20 meters high, and bridges of considerable extension, for which aerial photography taken by drones was used.



15. Screenshot of images to obtain 3D model sculpture of Leonardo Borrás

In the case of the Sketchfab dissemination platform, it works as a community portal, as a social network (visitors can browse, rate and even download the model to use it, according to the permissions and license granted by the creator), thereby which is also a very interesting tool to disseminate the results of the project. The publication can be done by uploading the models (size limit according to the Sketchfab license that is contracted) and directly from some 3D editing programs that have plugins for direct publication, such as 3D Zephire. Sketchfab users can choose to make their 3D models available for download under Creative Commons licenses, 4-0 (publication with attribution, non-commercial purposes) and some of these downloadable models are compatible with 3D printing.

The realization of 3D models allows the physical printing of replicas of the object, which can have different applications for dissemination (people with functional and sensory diversity), in tourism promotion (fairs and congresses), replicas in different sizes (merchandising), etc.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



16. 3D printing of the Ribera Arab towers- Introduction of the MUMA Virtual Visit October 2020





RIBERANA GUIDE 2020. Mancomunitat de la Ribera

• <u>Interactive elements</u>



17. Turn-page on website-bibliographic heritage

In the case of bibliographic heritage, the creation of multimedia elements related to the digitized publication is proposed, for dissemination and interpretation purposes, for dissemination through the project's website. These types of featured multimedia elements allow contextualization of the publication and provide complementary and updated content. A viewer is proposed as a "turn page" that simulates reading the book in physical format. In addition, it is proposed to download the text in different formats so that it can be read on computers, tablets or electronic books. In addition, it allows the selection, citation or translation freely, by users, in the event that the rights associated with the publication allow it.

Among the multimedia elements that allow contextualizing and expanding the information related to the publication, we can highlight images, links to other publications, infographics, maps and illustrations included in the publication, videos such as interviews with the author, other related texts.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



18. Bibliographic heritage website space - multimedia elements

In this case, with the proposed publication *La Ribera: Imatge i Territori* de Enric Ramiro, an interview was conducted with the author to talk about the content and the topicality of the analysis proposed in the book.

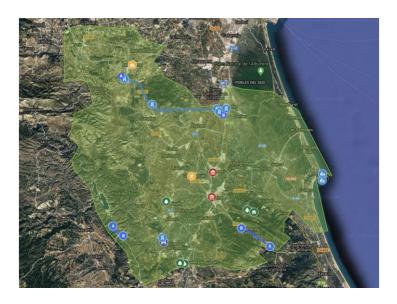
The publication on the website allows its dissemination through social networks, in addition to working on the web positioning of its content. It allows incorporating different elements such as slides, GIFs with maps, turn-page of the book, etc. This proposed model is the one that will be used for other publications to be digitized, such as books related to the history and heritage of municipalities in the Ribera Alta.





RIBERANA GUIDE 2020. Mancomunitat de la Ribera

• Interactive maps



19. Interactive map (Google Maps) with digitized elements - Riberana

The use of Interactive maps that include layers with different Interactive elements is proposed to know the location and relation with the territory of the different digitized objects. There are different online applications, such as Google Maps, or open source cartographic viewers) to integrate different elements, maps, and relate them to each other.

These maps allow the use of icon and color codes for interactive points that lead to the files of the different elements housed in the digital repository, also allowing the integration of multimedia elements through links to photographs or videos, in addition to establishing colored areas on the map, allow changing the view of it. They are elements that can be easily shared, and integrated into different web pages.

These maps will also be useful for the presentation of immaterial elements related to the territory, such as interviews or stories with protagonists or contents that take place in any of the points of the region. In the case of the *Les veus d'una Ribera* project, of short stories read by different inhabitants of the Ribera villages and their dialect varieties, this tool was used to present the result of the digitalisation of the content.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

5. SHORT TECHNICAL GUIDE TO EQUIPMENT

This section briefly describes the minimum recommended technical equipment for the implementation of the Heritage Digitalisation Department Natural and Cultural. It is about having different professional image screenshot and treatment teams to be able to later share their content and offer the multiple possibilities from the cultural, scientific, tourist and revitalization point of view that they offer.

5.1. Material

5.1.1. Panoramic photos and videos



20. EOSM50 camera

Reflex camera for still photography



21. GoPro Max 360 Camera

Compact 360 degree sports camera (proposed in the image is the GoPro Max 360). This camera will allow us to screenshot 360-videos and photos for beta editing of virtual visits.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Others: 7mm lens, batteries, tripod, rotating panoramic head, extra memory card (100 GB), mobile phone with shooting software, external flash, lights, camera and OBJECTIVES cleaning kit, backpack to transport the material.

Software

- Photo editing, such as Photoshop or Gimp
- Editing videos, such as Premier or Da Vinci
- Panorama editing, such as Ptgui program
- Edition of virtual tours, such as Pano 2VR
- Photogrammetry editing, such as Agisoft or 3D Zephire

Stationary computers with 16 Gb RAM, 2 TB hard disk

At the time of choosing the equipment with which the department would be supplied and in order to digitize the cataloged and reviewed heritage, it was taken into account that the cost of the equipment was not very high, and its maintenance was simple, in addition to being technology that was readily available and standardized.

In addition to the equipment exposed, the use of other types of image screenshot devices is also recommended in the digitalisation work of the department, such as drones (unmanned device for capturing aerial images), scanners of different types for digitizing the bibliographic heritage, etc.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

	DIGITALISATION TECHNIQUES	
	DATA COLLECTION	DISSEMINATION TECHNIQUES
Natural	PhotosDrones360 videoVirtual visit	Web/App / Social Media
Museums	3DPhotos.Virtual visit	Web/App / Social Media
Intangible	Story / video narratives3DVideosMaps	Web/App / Social Media
Architectural	- 3d - Photos - Virtual visit	Web/App / Social Media
Bibliographic	ScannerApp webPDF with OCRTurn-pagePhotos	Web/App / Social Media

Table 3. Digitalisation techniques. MANRA Digitalisation Action Plan





RIBERANA GUIDE 2020. Mancomunitat de la Ribera

5.2. METHODOLOGY. PANORAMIC CREATION

As previously stated, the creation of panoramas, photospheric images and 360 panoramas is proposed for the digitalisation of different heritage elements. To do this, it will be necessary to organize how the images will be captured and their subsequent treatment. The Heritage Digitalisation Department of the Mancomunitat de la Ribera Alta has chosen to use software to use a panoramic stitching editing software called PTGui, from the Dutch company New House Internet Services BV.

It is important to establish a workflow, from preparation, to image capture, conversions from raw, raw storage, etc. The entire process must be documented to achieve a standard and quality final product, as also the study of the point of view, lighting conditions, choice of camera and optics, in a procedure manual that all people who participate in the digitalisation process are familiar with.



22. Preparation of the scanning work with 360 panoramic







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



23. Rotating tripod head for 360 panoramas

To make our panoramic photos, we propose the use of a Canon M50 camera with the tripod and the rotating head for panoramas and the Canon 15mm lens or the 7 Wide-angle Artisans. It will be important to have a remote control system for shooting photographs to facilitate the work of the operator.

It is recommended to know the conditions of the space to be digitized, to have had some contact in the area. The ideal, although not always possible, is to carry out a documentation visit prior to the site and, among other types of documentation images, take photos with the 360 panoramic camera as a first online edition.

Later, in fieldwork, to carry out panoramas with multi-shot technique, it is recommended to make adjustments in the camera and tripod situation, using the special rotating head for panoramas with which to avoid the parallax effect (perception by which the position of an object in the visual field changes with respect to the point from which it is observed). To do this, we will put an object in the background and rotate the camera. If the background is not moving relative to the subject, camera position is correct.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

With everything under control, we will enable the HDR mode in the camera, with bracket, so that it takes 3 photographs with 3 exposures for each angle. Take a photograph every 15 degrees, to edit with stitching technique. Two positions, in addition to photo nadir. In total, we will compose each panorama with more than 300 photographs.

The image shows an example of the result of capturing images with HDR bracket that will later allow the stitching and optimization of panoramic images from the existing source.



24. Visión de fotografías en explorador de archivos

In the entire process of capturing images, and since we will return to the study with a large number of files, we must be followed some guidelines that facilitate the subsequent editing work. For example, if you have had to repeat a panoramic view, a visual marking system is recommended that allows you to quickly recognize these orders in post-production. Through a system of color cards, to which we will take a photo in the same environment in which the panoramic photograph is being composed, we will indicate if there have been any changes or errors. In this way, the range of files that will not be valid will be detected easily; we can make a first screening from the File Explorer and carry out a more agile import to the PtGui editing software.

In the card system, the following code is proposed:

- **Yellow card**: the previous shot is not correct.
- Red card: wrong whole panorama. Repeats from the card.
- Green card: starting panoramic shots (booster signal)



25. Card to mark photos shots for 360







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

5.3. Checklist for 360 photos

It is proposed to incorporate within the image screenshot process is the use of a checklist of material to carry out images for spherical 360 photographs

- **⊃** Camera GoPro 360
- Camera Canon M50
- **>** Lens 7
- **2** Lens 15
- → Backup batteries (charged)
- **3** Backpack
- **3** Tripod
- **⊃** Rotating head for panoramas
- **3** Memory card (about 100 GB minimum) Reserve card option
- **⊃** Color cards (for marking panoramas)
- **3** Mobile phone with App to link with photographic camera







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

5.4. Panoramas edition and 360 virtual tour



26. 360 photo editing with stitching software

After capturing the images for the creation of the panoramas, a post-production and joining process will be necessary to make a complete 360 panorama, by stitching the images. In this process, a manual adjustment will also be necessary with the incorporation of control points, image editing, retouching and adjustments, etc. With a correct fieldwork methodology, post-production will be simpler and will offer greater possibilities of having a reliable, high-quality final product.

Once the panoramic views are finished, we will edit the Virtual visit route, composed of the edited panoramas, their connection between them and the interactive multimedia points that will enrich the route. The appearance of the Virtual visit (arrows, icons, information points, etc.) must also be configured with a skin that we will keep in the following virtual visits or that, we can update and improve.

The final project is published online through a management platform. To be able to consult it, it is uploaded to the server and published. Through a link, we can share through our different channels: social networks, webpage, networks and spaces of third parties and collaborators.



Regarding the content, texts ... the platform allows from the same Virtual visit connect with a series of text boxes and content that is offered in the language chosen by the user.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

6. DISSEMINATION. EXAMPLE OF RIBERANA WEBSITE



Riberana: repositorio digital de patrimonio de la Ribera Alta



28. Front page Riberana.es

Riberana is the digital repository of the natural and cultural heritage of the Ribera Alta de Xúquer region (Valencia), made up of 35 local entities, 220,000 inhabitants and 979.5 km². The purpose of the website is to collect, disseminate and preserve the tangible or intangible heritage of the region, through online means and through digital objects. Riberana includes multimedia, hypertext and interactive elements such as virtual tours, 3D elements, panoramic views, 360 videos ... Access in Valencian, Spanish, English and French

The Riberana website shows the work of the Department of Digitalisation and the entire Mancomunitat de la Ribera Alta, the contact between the institution and the citizens. In this website, you can access digitized objects, indexed for easy search in different categories according to content: natural heritage, bibliographic heritage, Museums and collections, archaeological and historical heritage.

Riberana is, after all, the axis of the digitalisation project of the Heritage Digitalisation Department of the Mancomunitat de la Ribera Alta, the place where all the available elements can be found. The website makes available to the public the heritage of the Ribera Alta del Xúquer. It allows you to find (in an indexed way) the elements that are part of the repository prepared and updated by the Mancomunitat de la Ribera Alta, displayed in an attractive way in different multimedia formats







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

such as virtual tours, 3D elements, panoramic views, 360 videos... They can be found easily in the menu, discover various elements on its front-page as a suggestion, on the upper slide or the grid of elements at the bottom (it is possible to offer this type of suggestion in a random way, according to the user's preferences, in other spaces of the web page). The elements can be shared in other web spaces and can be an interesting promotion and dissemination tool for tourist companies in the area that want to show the cultural and natural offer of the area in an attractive way. To facilitate access to the greatest number of people, the website has versions in various languages. Currently, Riberana is accessible in four languages: Valencian, Spanish, English and French.

The Riberana website is the interface that allows users to know the content, navigate with it, find similar elements, and discover the digitized heritage objects that may satisfy their personal or professional interest, from a cultural, academic, tourist point of view or just for leisure. The constantly updated work carried out by the Heritage Digitalisation Department of the Mancomunitat de la Ribera Alta is concentrated in this single space.

More specifically, on the website a menu has been arranged that allows knowing the elements according to the initial category assigned. Starting with the natural heritage, we find virtual routes through natural landscapes, paths or descents in 360 degrees. In the great category of cultural heritage, archaeological and architectural heritage has a prominent place, which includes a large part of the monuments, buildings and constructions, with 3D elements such as the Arab Towers or the Pont del Rei, in Gavarda. Another of the subcategories, the one referring to Museums and collections, allows us to discover virtual visits of different Museums in the Ribera Alta. The bibliographic heritage category refers to publications related to the region that have been digitized. Finally, intangible heritage includes such interesting topics as oral memory, dialect richness ... through video collections and their integration into maps. In addition, sports, with the Valencian ball and the "raspall", are part of this collection, allowing their interpretation through new techniques such as stereoscopic videos, image gallery, etc. The website allows integrating all these elements, distributing them in interactive cards of each element that allows choosing that multimedia object related to the cultural or natural asset, and relating and crossing those elements that may belong to more than one category, being integrated into these cards and collections.

In addition, the search through filters will allow the visitor to know an important part of the heritage according to the entered parameters that, beyond the classification







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

exposed by categories, such as the population in which it is found, the degree of protection, its dating, the type of element (that allows, for example, to see all virtual visits, all 360 videos, in the general scope of the repository or related to any of the categories) and search by thematic keywords.

The IT department of the Mancomunitat de la Ribera Alta has developed the Riberana website. The webmaster has worked closely with the Digitalisation Department of the Mancomunitat de la Ribera Alta to launch and maintain the website, make a model of files, and the integration of elements such as videos, virtual visits or 3D models found hosted on third-party sites such as Youtube or Sketchfab.

The address to access the website is the following, with different domains:

WWW.RIBERANA.ES
WWW.RIBERANA.EU
WWW.RIBERANA.COM

In the Riberana website, it is shown in a single space, as a base camp for all the digital production that will be published by the department. The following presentation structure is propose:

• Front page for access to Riberana, in which the user has the first contact with the project and the elements that they will be able to discover. In this space, simple searches are carried out and the possibilities offered by the website are understood allowing offering content of interest due to its current or relevance.

Thus, this space has the following elements:

- Slide at the top of the website, in which different images appear in a carousel with photographs of outstanding elements of the heritage.
- Easily identifiable search widget, which allows searching by filters within the catalog of digitized objects.
- Interactive elements proposal on the font-page, at the bottom of the website, that the user can click and take them to know these outstanding objects of the Riberana offer. The inclusion of 6 or 9 elements is proposed.
- Menus at the top of the website, allowing access to digital objects separated by categories and showing general information about the project and the website.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

• In the section "What is Riberana?" the project carried out by the Mancomunitat, the creation of the Heritage Digitalisation Department and the promotion thanks to the Interreg Europe CD-Eta project and its main objectives are presented. A presentation video and an interactive map created from Google Maps with the Ribera Alta region are displayed, with interactive points that lead to different elements of the cultural or natural heritage digitized and visible both on the Riberana website and in the different viewers mentioned in the guide or future ones. It allows at a glance, to know the growth of the project, and to physically locate the location of the elements in addition to allowing more information and to directly visit the virtual route, 3D object, video, etc. and to be able to share it in a simple and agile way.

In addition to classifying and sharing the files related to digitized heritage objects, the website offers other types of content and interesting applications due to their attractiveness, such as the following:

• Time comparisons between images, superimposing images of the same object at two different times, as shown in the example. (Photo).





29. Time comparison of photographs







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

• Zoom in on high-detail images, as explained in the formats section of this guide, allowing you to explore in detail with a "magnifying glass" some heritage element.

Within the dissemination strategy of the project, the positioning of the website will be very important; therefore, it will be essential to take care of the exposed content for its indexing and positioning in search engines such as Google, for the different exposed elements. In addition, the social media strategy and online reputation that the project achieves will also be very important for the project to be known and meet its social objectives. In this same guide, it is proposed, as an annex and Social Media Plan, with the structure of social networks and the proposed strategy to achieve these objectives

It will also be important to index the metadata of the objects included in the web and the connection between the location of these objects in the digital repository and the publication on the web, either through the suggestions section described in this section or through the Riberana internal finder with the proposed cross filter system. This metadata indexing, to which this guide also refers later, must follow the standard proposed by Europeana for its future inclusion in different national and international reference aggregators.

Finally, it is necessary to ensure the general and specific objectives of the project and how these are materialized through the start-up and operation of the Riberana website. The dissemination, which is materialized through free access to the content, will have a license free of Creative Commons 4.0, 3.0 or 2.0 rights (according to the attribution requirements and commercial use thereof). It will be facilitated that these contents are shared, embedded instead of third parties, and that they can be used for the cultural and tourist promotion of the territory. The end users that can benefit from it are researchers, students, administrations, and the public. Riberana will thus continue a line of work with a scientific will, whose final objective is to index these elements in reference cultural aggregators such as Hispana and Europeana, and of cultural and tourist dissemination.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

7. STORAGE

7.1. INVENTORY OF ELEMENTS IN RIBERANA

7.1.1. Collection management

The collection of elements in Riberana will be in continuous growth and expansion with the inclusion of new items due to the digitalisation work of the department. Thanks to the documentation, screenshot and digitalisation of different objects, these will be incorporated into the existing categories. In addition, there will be the creation of collections, expansion of objects related to authors, styles, eras, as well as the connection through tourist routes with the common links between their elements.

As part of the strategy for the preservation and dissemination of these elements, a correct indexing of their metadata should be considered, managing the organization of the elements that make up the heritage catalog of the digital repository of the Mancomunitat de la Ribera Alta.

These elements will be divided into different categories, corresponding in turn to the categories displayed on the Riberana website. The digital storage of these digital objects is proposed through a virtual hard disk, separated into folders and subfolders, from categories such as natural heritage, to other minor ones. The proposed hierarchical distribution of these subfolders will be as follows, in order to group elements with common characteristics in the same space.

The current proposal is as follows: cultural heritage (four categories) and natural heritage.

Cultural heritage includes, in turn, four major categories (Architectural, Museums, Bibliographic and Intangible), along with other minor categories, such as the ones proposed below:







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Hierarchical file structure. Categories tree

→ Natural heritage:
Riu Xúquer
Routes
Examples: Ruta Murta, Salines, Rupestres, Via Verda antic Trenet
→ Cultural heritage.
Bibliographic heritage
Intangible heritage.
اج Sounds (Les veus d'una Ribera, Arxiu de la Paraula Viva)
اج Sports (Trinquet)
Archaeological heritage:
→ Sources
جاج Churches
∍l _→ Bridges
Altarpieces
, I _→ Sites
اچاج Examples : Villa romana
Defensive constructions
جاجاج Examples : Batería Napoleónica
→ Towers. (Torres de la Ribera project)
Examples: Torre Plaça Benifaió, Torre Mussa, Torre Racef, Castell Montroi, Castell Alèdua
. Heritage Museums and collections







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

L **Examples**: Museo Festa Algemesí, MUMA Alzira

In addition to separation by folders, the metadata indexing process for digital objects should include this general separation by main characteristics. As well as a temporal classification (reference to periods, centuries, artistic or literary movements), and spatial classification: By municipality to which it belongs, location, street, departure, region, province, metadata related to the digital object, such as format, version, date, technical data, etc.



MANCOMUNITAT

MANCOMUNITAT DE LA RIBERA ALTA



RIBERANA GUIDE 2020. Mancomunitat de la Ribera

🗸 J cultural

- arqueologico
- > 🌄 bateria napoleonica
 - fuentes
- > 🌆 iglesias
- > 🌄 puentes
- > 🚮 retablos-y-paneles-ceramicos
- > _ villa-romana-
- 🗸 🌄 bibliografico
 - > Jibros
- inmaterial
- 🗸 J Deporte
 - > 🌄 pilota valenciana
- ✓ Sonoro
 - > 🊮 arxiu de la paraula viva
 - > 🊮 les veus una ribera
- ✓ museos
- > 🌄 alzira muma museu municipal
- > 🌏 museu valencia festa algemesi
- > J social mancomunitat
- ✓ Jorres
 - > 🚮 castell adeua llombai
 - > J castell montroi torre
 - > 🊮 torre mussa benifaio
 - > 🌄 torre plaza benifaio
- > 🊮 torre racef almussafes
- ✓ Janatural
 - > 🚮 riu xuquer
- - > 🊮 ruta_murta
 - > alines
 - > 🌏 tous rupestre
 - > 🌄 via verda en bici

30. Example of the storage structure by categories







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

7.2. DIGITAL HARD DRIVE

The result of the digitalisation work, in addition to being disseminated through online media, must also be classified and stored correctly, to connect with these digital media for their preservation and to be able to have them for future applications.

To facilitate storage, online access and teamwork, it is recommended to store, organize and preserve the work in a digital hard drive with unlimited capacity, in the case of project start-up, using the Dropbox platform (500 GB minimum capacity). In addition to working with this virtual hard disk, it is recommended to have a refresh and copy protocol for preservation purposes.

Working with digital hard drive will also allow to connect the stored files (totally or partially) with the online publication of elements, such as virtual routes, and to integrate with the interface (web) allowing the immediate updating of contents, the expansion of the catalog and the customization of the user's search results.

As already indicated in the previous chapter, it will be essential to define the labeling from the beginning and distribution in folders and subfolders, for its organization and guarantee the subsequent access of the content at the user's request. Among its hierarchy of use of the repository it is recommended to have a separate folder from the rest dedicated to saving files in original or raw format (without color, light, clipping), which allows new interpretations of the information thanks to applications that may appear a future. This virtual disk allows you to work remotely and as a team, with the advantages it entails for working in different teams, in synchrony, and human teams located in different geographical locations.

Next, a nomenclature typology is proposed to be able to store in an organized way the content related to the digitalisation of heritage, with a broad perspective that allows the inclusion of new categories and formats, to guarantee its functionality in the long term.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

7.3. NOMENCLATURE: NAMING THE FILESS

First, it will be necessary to save each element in the corresponding patrimonial category, according to the tree proposed in <u>point 2</u> of this manual, in the most detailed way possible, and a deep folder structure that allows the inclusion of categories and subcategories. Both in the resulting digital objects and in the project folders it is recommended to include the name clearly, with the name of the municipality, the date, and then the different multimedia objects that will make up this element. This information will be useful when searching for elements, avoiding duplications and being able to take advantage of the recruitment work in the future.

In the case of the Mancomunitat de la Ribera Alta, a folder is created for "native" and raw files, called "repositori emmagatzemament – raw". Includes video files, 3D models and other large files that will not be part of the broadcast (as they are hosted in third-party spaces) but that will be available for reissue, or to be able to share in original format in download mode. They are native 3D models (only the file with permalink to Sketchfab will be shared in the broadcast folder) camera raw files, raw files, versions, etc. With the same structure proposed in the previous point.

The "main" folder is called "Mancomunitat Ribera Alta", and in a more generic way, it will host others related to heritage, and finally the cultural and natural categories. The thematic tree proposed in the previous point descends from these categories.



31. Riberana virtual hard drive







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

RULES AND RECOMMENDATIONS:

It is important to establish nomenclature rules that avoid confusion and redundancies and are followed by all members of the department. It will be important to include, for example, the name of the project and the date of edition in the format day month year without spaces or bars. Example 26082020. This established rule must always be followed from the beginning. To avoid compatibility problems, it should be written in lowercase, without accents or accents, or spaces, or special characters, or letters such as \tilde{n} , c...

After the categories, each project will have different categories, in a tree, referring to the types of content that can be found, in a descending tree.

🌏 3rdparty	20/07/2020 9:59	Carpeta de archivos	
J documents	02/07/2020 9:20	Carpeta de archivos	
fotos	22/07/2020 11:05	Carpeta de archivos	
🚮 images	20/07/2020 9:59	Carpeta de archivos	
🚮 media	22/07/2020 8:23	Carpeta de archivos	
pano2vr	22/07/2020 10:23	Carpeta de archivos	
🚮 ptgui	22/06/2020 9:29	Carpeta de archivos	
🌏 tiles	20/07/2020 10:00	Carpeta de archivos	
🚮 videos	10/07/2020 12:41	Carpeta de archivos	
webxr	20/07/2020 10:00	Carpeta de archivos	
📝 index	20/07/2020 10:00	Archivo HTML	3 KB
pano	20/07/2020 10:00	Documento XML	42 KB
pano2vr_player	20/07/2020 10:00	Archivo JavaScript	259 KB
🏂 skin	20/07/2020 9:59	Archivo JavaScript	985 KB

32. Folder distribution by format







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

The proposed formats are the following: photographs, panoramas, videos, virtual visits, documents, 3D models, the structure is:

Multimedia file type: Lphotographs LL edit LLL high quality LLL low quality

L ptgui (panoramas, 360 photographs. Called ptgui by the editing software used)

Լ video ዜ video 360

by documents (documents, PDF, texts ...)

L Pano2VR (Virtual visit)

以 (Folders generated automatically by the program)

ֈֈ File and skin corresponding to the Virtual visit.

المال "www" VERY IMPORTANT. Folder created for output of Virtual visit. It will be the published folder for the virtual path. It should be configured as "public on the platform". لم المالي info mkn. Text files generated on the platform for pop-ups of contextual information. They include links to photographs, these links generated from the platform itself, in addition to formatting (white text, semi-transparent background, etc.)

ԼԼԼԼ EN (English) ԼԼԼԼ ES (Spanish) ԼԼԼԼ VAL (Valencian)

 3D objects ԼԼ Links to Sketchpad's permalink.



MANCOMUNITAT RIBERA ALTA

MANCOMUNITAT DE LA RIBERA ALTA



RIBERANA GUIDE 2020. Mancomunitat de la Ribera

8. METADATA

Metadata are essential to organize information in the digital environment. They serve to identify and retrieve digital objects in environments such as digital repositories. They will also have great importance in the preservation of the digital collection (preservation of the original document and the different digital versions).

Below is a brief introduction to the question of metadata that should be linked to digital objects. Metadata are all those data or information that is attached to digital objects, with different purposes (descriptive, technical, for preservation purposes, etc.). These are "structured descriptions of an information object whose purpose is to facilitate the description tasks, recovery, management, preservation, access and use of objects, and thus, make the data useful" (Méndez, 2002).

These metadata will serve for the indexing, storage, consultation and recovery of the digital objects included in the digital repository. There are different types of metadata, in addition to different formats in each one. Metadata are uniform records that can be easily understood, and managed by both humans and machines. The structure of these elements is called a metadata schema (schema) and, for uniformity, one must resort to standard metadata rules or schemes such as OAIS, EDM, METS, and PREMIS...

These schemas include different aspects, such as the semantics (what information each element contains), the content rules (type of characters, options or open list) and the syntax (plain text, XML, RDF, JSON, etc.) of metadata for indexing, storage, consultation and recovery of elements.

Types of metadata to use:

- Descriptive metadata, describe information resources
- Structural metadata, various components of complex information resources are organized internally
- Administrative metadata (rights, quality management, update cycles and provenance)

Actually, the differences between descriptive, structural and administrative metadata are quite diluted and, therefore, it is very complex to try to assign a schema to a single category (Lavoie and Gartner, 2005). In general, most metadata schemas or standards have a mix of elements from these three categories.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Among the descriptive metadata, there is the primary metadata, which are those that show the model, context, meaning and that will make the object accessible from the repository, storage or search engine. Then there are the secondary metadata, with characteristics related to the object such as author (including name, possible pseudonyms, biographical data, etc.), place (denomination, geographical location, etc.), period, style, available license of the content, etc.

Secondary data includes technical data related to the digital file. It must include from the technical metadata obtained after the screenshot process (image type, color scale, color system, color space, bit depth, spatial resolution, file size, file format, compression, etc.), its quality control and detailed documentation of these tasks, up to descriptive metadata (object, at a formal level). It is also recommended to add metadata related to the record of the actions carried out with the objects (copies, format changes, versions ...) for preservation purposes, to be able to provide useful information in the event that it is necessary to recover the files and aware of the risks of obsolescence. Other information that should be included in these files are the type of camera, scanner, parameters and light conditions, date, time, and even the operator who performed the digitalisation (authorship of the digitalisation in its different states). This information must be either embedded or linked in the digital file permanently, (embedded in the file's bit chain, linked by identifiers, or "encapsulated") so that this allows its preservation and correct reproduction.

In addition to the administrative information of the object (title of the document, author, creation dates, location, origin, management responsibilities and intellectual property rights, as well as aspects related to its content), other metadata must be added. This so that objects can be related to each other (images such as pages of a book, objects belonging to the same space, collection or element), as well as existing versions or replicas...

Here is an example list of descriptive metadata:

- Examples:
- Theme
- Date
- URL
- Author
- Description
- Size
- Title
- Subtitle
- Alternative title
- Creation date
- Title Date



MANCOMUNITAT

MANCOMUNITAT DE LA RIBERA ALTA



RIBERANA GUIDE 2020. Mancomunitat de la Ribera

- Publication date
- digitalCameraModelName







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

9. CONSIDERATIONS ON PRESERVATION: CHALLENGES AND OBSOLESCENCE

The choice of formats is very important to ensure the permanence of the files generated during the digitalisation of heritage. In addition to the formats used for dissemination by electronic means, we must save versions in formats that allow modification without compression or loss of quality (formats different from those chosen for dissemination on the internet, web and social networks). These versions will allow reproducing and making any type of later version on the digital object. It is very important for the digital preservation of the collection, as are other decisions such as the choice of storage media. It is proposed to have a protocol for copies to physical format (hard disk). A reliable virtual hard drive and making regular copies of content to physical formats is also essential. The custody of these storage elements (hard disk) will also be important in making an effective and adequate preservation. The software that allows the reading of our files must also be upgradeable and have maintenance. We must preserve, as well as the files, the software itself and the version used and migrate if necessary to other software to preserve the object as accurately as possible.

Preservation involves guaranteeing the ability to access the content and process digital objects in a collection. To do this, maintaining the integrity of the files and avoiding obsolescence, both in media, formats, etc. is necessary.

Consult the Digital Preservation Handbook, 2nd edition (Digital Preservation Coalition, 2015), http://www.dpconline.org/handbook, referenced at the end of this guide in your bibliography, is necessary. This Digital Preservation Handbook includes a set of more practical questions that should cover the entire life cycle of digital objects.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Addressing the issue of digital preservation from two perspectives is necessary: a physical perspective, which attends to the good condition of the supports and the physical representation of the data on them, and to the availability of hardware and software systems at least for reading data from those supports. Second, a logical perspective, which seeks that the supports, file formats and encoding of the information within the files, are not obsolete, so that the computers, operating systems and software applications available at any time can read and decode the contents.

Physical perspective

Risk factors: environmental factors (temperature, humidity, atmospheric pollution, presence of strong magnetic fields and presence of sources of dirt or possible biological attack), improper handling, manufacturing faults, degradation, wear due to excessive use...







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Logical perspective

Obsolescence problems related to storage media; file nomenclature systems and file organization systems; software applications and code libraries; file formats and data compression methods; as well as the maintenance of databases with metadata information on the collection of digital objects and the links established with the objects themselves

Maintaining redundant backup copies of digital content is important in a digital preservation program. Taking as an example the preservation protocols in the Digital Preservation Handbook; Preservation levels of the National Digital Stewardship Alliance (NDSA) (NDSA, 2013), doing a combination of online and offline copies to achieve a good combination of data access and data security is recommended.

Nivel	Acercarse	Riesgos abordados y beneficios logrados
1	Dos copias completas de los materiales digitales que no se comparten. Una copia debe estar sin conexión. Para materiales digitales en medios heterogéneos (discos ópticos, discos duros, etc.), extraiga el contenido del medio y colóquelo en su sistema de almacenamiento.	Capacidad básica para recuperarse de una variedad de problemas, incluida la falla del sistema de almacenamiento. La pérdida o daño de una copia se puede recuperar utilizando la otra copia. Los materiales digitales son más fáciles de administrar cuando se encuentran en un solo sistema de almacenamiento.
2	 Al menos tres copias completas. Al menos una copia en una ubicación geográfica diferente. Documente su (s) sistema (s) de almacenamiento y medios de almacenamiento y lo que necesita para usarlos. 	Igual que el anterior más protección contra desastres naturales y otros eventos importantes. Buen nivel de acceso y seguridad de los materiales digitales. El personal tiene políticas y procedimientos claros a seguir, por lo que son más eficientes, se reducen los costos y se pueden administrar los cambios de personal.
3	Al menos una copia en una ubicación geográfica con una amenaza de desastre diferente. Proceso de migración y monitoreo de obsoloscencia para su (s) sistema (s) de almacenamiento y medios.	Igual que el anterior más protección contra los riesgos a largo plazo asociados con la obsolescencia técnica. El acceso continuo al contenido es posible incluso durante migraciones y desastres.
4	Al menos tres copias en ubicaciones geográficas con diferentes amenazas de desastres. Tenga un plan integral que mantendrá los archivos y metadatos en los medios o sistemas actualmente accesibles.	Como se mencionó anteriormente, con una gama completa de riesgos abordados que incluyen pérdidas accidentales y ataques maliciosos, bloqueo de proveedores e inestabilidades presupuestarias. El contenido tiene alta disponibilidad, los costos son predecibles y manejables, existe la capacidad de lograr una certificación de repositorio confiable.

Table 4. Preservation levels of National Digital Stewardship Alliance (NDSA) (NDSA, 2013)



MANCOMUNITAT RIBERA ALTA

MANCOMUNITAT DE LA RIBERA ALTA



RIBERANA GUIDE 2020. Mancomunitat de la Ribera

10. CONTENT LICENSE

In accordance with the objectives of the department, to value the Heritage of the Ribera Alta and give access to everyone, the elements produced by Riberana will be in the public domain, for citizens to enjoy and share them. In this way, a greater interest in the local Natural and cultural heritage will be achieved, new content will be created from the digital objects presented, and other public administrations and private entities will be able to use the content.

Following the trail of free software, copyleft implies authorizing the use, reproduction or transformation of the work on the condition that the new copy is also used freely, and the author is morally respected. The modification, transformation and the improvement of the object represents a benefit for the rest of society, as well as for the author of the original work. Precisely the "Open Access" movement seeks to spread knowledge and use the internet as the channel to share this knowledge.

The objects published by Riberana are under Creative Commons license. Creative Commons is a non-profit organization to give legal form to these new ways of "exploitation" of intellectual property. They are free licenses that offer their creations to the public domain, and are widely used in institutional repositories. Different possibilities and restrictions can be established, such as attribution (cite authorship of the work), obligation to share the same (resulting work with the same rights), allow or not commercial uses and allow or not derivative works and the combination of these limitations gives place to the different Creative Commons CC licenses, which are the proposals for use in Riberana.

University repertoires follow this philosophy of Open Access as well as scientific journals. Creative Commons is a non-profit organization, founded in 2001 by Stanford University professor Lawrence Lessig. These are widespread free copyright licenses. The author decides the conditions to share the work:

- a) Attribution: Cite and acknowledge the original author. The copying, distribution, public communication of the work and derivative works is allowed. Even commercial use.
- b) "Share alike": identically, as long as the new copy has exactly the same type of license. It is the one used, for example, in Wikipedia.
- c) "Non-commercial": Non-profit.
- d) "No derivative work": does not allow transformation.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Most of the material accessible on Europeana is from works in the public domain or material under Creative Commons licenses.

According to Gómez Guerrero (2006), this does not imply the destruction of the concept of "copyright". CC intends to find an intermediate space that allows creators to protect their works and gives them more flexible tools than traditional copyright to be able to distribute and share their proposals.

For all this, all the works published by the department have license for use by 4.0 and 3.0 Creative Commons, to be share freely, without profit and respecting the authorship. Conditions can be consulted on the Creative Commons website below

http://creativecommons.org

http://creativecommons.org/licenses/by/3.0/es/

http://creativecommons.org/licenses/by/4.0/es/







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

11. DIGITALISATION AND TOURIST PROMOTION

The cultural and natural heritage offers great value for tourism potential. As stated in this guide, new forms of dissemination are on the rise, and allow the recreation of cultural and natural assets, their cataloging and dissemination by digital means, offering great advantages also from the point of view of tourism promotion.

The use of new technologies is a trend highly valued by users and visitors, which also contributes to configuring accessible tourism products for people with functional diversity. They are an enriching complement for on-site tourism products, and a great alternative for major mobility restrictions such as the one experienced during the COVID-19 alarm.



33 Recreation of La Murta monastery. Sketchfab

Digitalisation can contribute to contextualize and learn about others elements related to the heritage element that we are visiting, even if they are in different geographical points, or even if the tourist has not yet made the visit and is in the planning phase. For this reason, we consider that the digitalisation of heritage offers great advantages as an economic engine and tourism promoter.

First, diversification allows promoting local tourism, bringing together this type of elements that may be unknown to the visitor who seeks to visit differentiated and unique elements. It values this Heritage, its connection with the history and culture of its environment, and its knowledge contributes to greater concern for its conservation. They promote interest in the conservation of the cultural legacy and responsible tourism.







RIBERANA GUIDE 2020. Mancomunitat de la RI

Second, because of accessibility, as we have already pointed out. Virtual visits and digital models allow access for people with functional diversity, or even to elements of interest but that are not open to the public. This is the case of private buildings, places of worship, and elements in restoration, places of difficult access or with advanced deterioration. Digitalisation makes it possible to increase the interest and knowledge of these places and economically enhancing their environment and the people who inhabit it. The use of 3D digital elements as well as models is a very useful interpretive and dissemination resource



34 Scale models obtained with 3D printing

The digitalisation of heritage promotes the seasonal adjustment of tourism, by offering alternatives throughout the year to the more traditional tourist offer, both in virtual and real space. It unites tourism, heritage and culture and expands the number of channels (websites, social networks, and traditional media) and content (3D elements, virtual visits, panoramic photographs and 360 videos) to reach the potential visitor, who knows a reality that until then it was unknown to them. It also stimulates the tourist offer and the heritage value in all tourist seasons, beyond the traditional flows and the traditional visitor area of influence.

The heritage digitalisation project makes available to the private sector (agencies, restaurants, outdoor sports and accommodation companies) a whole series of content and tools that they can freely use in the promotion of their activities. It also provides communication content from apps (being able to create interactive routes, digital participation activities ...) Virtual visits, 3D elements, videos and 360 panoramic views ... are innovative supports and can serve as a high quality tourist resource within the framework of tourist strategies of regional governments. In addition, the result can be integrated into the physical visit, with augmented reality (AR) and virtual reality (VR) techniques, providing new experiences for the tourist (reconstructions, Interactive elements, interpretation of the elements seen, etc.)







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



35. ICT integration in tourism promotion

The digitalisation of heritage also encourages interactive tourism, which seeks to visit online and learn about the products of the area, its history, culture, gastronomy ... Today's tourists are active, autonomous, and seek to differentiate themselves in their choice , from their previous experience, to the "post trip". Having all these types of tools means increasing competitiveness, visibility and the possibilities of offering new alternatives to the visitor.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

12. SOCIAL MEDIA PLAN

Prior to the start of the project, the Riberana social media plan is established to work within a project to disseminate the digitalisation of natural and cultural heritage. In the first place, in defining the strategy, it will be key to have the project objectives, and aligned with them, the objectives of this Social Media Plan:

- 1. **Align** content with audience. Detect what our potential audience is and what type of content they will demand.
- 2. **Increase** fan base. Qualitative and quantitative growth of the audience with whom we have already established a relationship.
- 3. **Diffusion** of the project and promotion through third party platforms and spaces. This includes the publication of posts in reference blogs, the media, other social networks of the entity, support from partners, specific promotional campaigns, etc.
- 4. **Improved** valuation and reputation of valuation and reputation. In the previous point, we have spoken in quantitative terms, and in this case, we refer to the perception and assessment by our audiences, and recognition by the main stakeholders (administrations, universities, the public ...)
- 5. **Positioning** related to both concepts, it will be important to have a leading role in the spaces where our potential audience is. In the case of the online ecosystem, having a good presence of our brand in search engines.
- 6. **Social networks**. Presence in own social networks, and of the entity, with publications aimed at improving brand recognition, reputation, attracting web traffic and increasing our base of followers.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

12.1. CONTEXT

Any project should consider and carefully observe its presence on the internet and social networks, especially when it is a natively digital project like Riberana. It is a prominent space for cultural consumption, and has a very active audience, increasingly heterogeneous. The changes in consumer habits and behavior in the information society have resulted in an audience that is always connected, and a wide range of online content that competes for your attention. The increase in the capacity, power and connectivity of mobile devices has made this the main space for consultation, communication and consumption of images and videos.

According to the 2019 report of the Information Society in Spain of the Telefónica Foundation (https://www.fundaciontelefonica.com/noticias/informe-sociedad-digital-espana-2019/) 93.6% of young people use the internet frequently, 99.1% do so at least once a month, a figure that has risen in recent years to reach the total population under 35 years of age. Of the total population between 16 and 74 years old, 90.7% had used the internet in recent months.

The AIMC (Association for Media Research) study on the *Use of the Internet in Mobility* in 2019 highlights that Spaniards spend more than four hours a day connected to the Internet for personal reasons, in addition to time connected for work reasons.

Regarding communicators, the trend is changing, with relevant native prescribers with a large mass of followers. Regarding content, video has a clear hegemony, and mobile stands out in the consumer space, promoting News formats such as square and vertical video, use of subtitles, short duration ... In 2017, mobile overtook the computer for the first time as preferred platform for accessing information on the internet, and the trend continues to grow.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

12.2. STAKEHOLDERS

For effective communication of the project, it is important to reflect on the stakeholders to whom we will address, and adapt our strategy and messages in order to reach these audiences and be able to communicate with them. First, we must reflect and detect which are these stakeholders, who are the public we want to reach, but also other types of agents that are relevant in achieving the objectives of the Riberana project, such as public administrations or Universities. Second, we will have to draw up a communication strategy related to these interest groups, in which we will organize our resources.

Similarly, calculating the coefficient of relevance between the digitizable elements and included within the production flow is necessary to establish a coefficient of the necessary communication and its relevance in order to reach our stakeholders. It is recommended to develop each audience map with the resulting groups.

Various areas to be reached are considered, from the administration and cultural management entities, those responsible for education and research, such as universities, associations... and their ability to influence public opinion, the ability to spread our messages, and to what extent their support for the project will contribute to its communication strategy must be analyzed. Next, a rating table establishes, by way of example, the calculation of said coefficient, establishing an estimated value for each variable, between 0 and 5, and calculating its relevance by taking the average and dividing the result by the maximum score.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Relation of repertoire of audiences / relevant variables

	Strategic dimension	Influence on public opinion	Dissemi nation	Economic interest	Necessary communication coefficient
Cultural associations	3	3	2	2	5
Town councils	3	4	3	4	7
Generalitat Valenciana	4	3	4	4	7,5
Diputació de València	2	1	1	3	3,5
Society in general	1	4	4	1	5
Universities	0	4	2	2	4
Ministerio de Cultura	1	3	4	1	4,5
Neighbor hood collective s	1	2	3	0	3

Table 5. Map of audiences, variables and necessary communication coefficient







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

12.3. **SWOT**

A very useful exercise to know how to focus and grow a project that is starting is the creation of a SWOT table. This serves to reflect on and to know what their strengths and weaknesses are; the external threats and opportunities offered by the market, as well as the audiences to make our project, Riberana, its means, its objectives and the way to achieve them grow.

This SWOT project situation diagram has to be reviewed periodically to serve as one of the starting points for drawing up the project's communication strategy.

WEAKNESSES	STRENGTHS	THREATS	OPPORTUNITIES
New. No similar experiences	Native content for digital media (social networks, web)	Competitors are more experienced	Social interest and of the leaders of the institution
Limited geographic scope	Growing sector	Changing context	Interactive advantages of online communication
Specific professional profile in digitalisation	European project support	Lack of human and technical resource infrastructure	Scalability / contact with experiences in other countries

Table 6. SWOT of Riberana







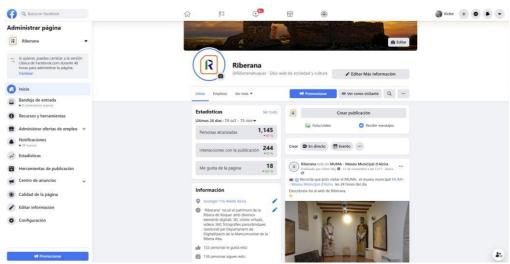
RIBERANA GUIDE 2020. Mancomunitat de la Ribera

12.4. MEDIA PLAN

In order to reach our target audience, we have to find those channels in which they are present, therefore, we will take advantage of the most used social networks to get our messages across and seek to establish a long-term relationship with our audiences. We will take advantage of other existing channels in the organization and, when necessary, we will open new profiles and channels in those networks that serve to establish an effective channel for our purpose

In addition to the web, already described in this guide, developing a social media plan, with the implementation and updating of the following social networks is appropriate.

Facebook



36. Riberana's Facebook

Very popular social network and one of the first to become widespread in our country. Our organization, in this case the Mancomunitat de la Ribera Alta, has a Facebook page with a prominent fan base and with quite a lot of impact. A large part of our stakeholders has active pages or profiles on this network, therefore, it will help us to establish a network of collaborators and share content with them.

Regarding the user profile, it is a social network widely used in the segment of more than 35 years, and experiencing growth in more advanced sectors of age. At a technical level, it allows us to include videos and photographs in 360; therefore, we can take advantage of a large part of this type of images obtained in the digitalisation process. Inserting links, to boost traffic to our website, sharing location, videos and images is also possible. We will seek a greater reach by making participants and asking to share the content with the agents involved (Museums, Town councils, associations, etc.), as well as the general social network of the Mancomunitat de la Ribera Alta for outstanding publications, such as premieres or presentations.

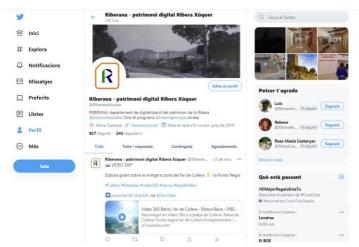






RIBERANA GUIDE 2020. Mancomunitat de la Ribera

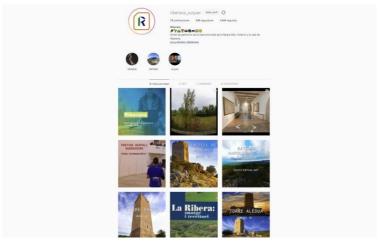
Twitter



37. Riberana's Twitter

Very widespread microblogging network, which allows conversation between users and share publications and news (so we will use the network to share links in order to attract traffic to our website). It has less interaction, but makes it possible to interact and search for profiles with similar interests. Unlike other social networks, it is recommended to post more than once a day. It allows carrying out small Surveys, share videos and the use of hashtags or labels in an efficient way. In the case of Riberana, it has a specific profile, since the profile of the Mancomunitat de la Ribera Alta on Twitter is institutional and informative towards the citizen, while Riberana will seek greater interaction and establish relationships with users and related profiles

Instagram



38. Riberana's Instagram

It is a visual network, perfect for sharing photographs of natural, archaeological and pictorial heritage... It does not allow easy link sharing, so we will not use it for web positioning, but for reputation within the social network itself. We will also use the stories space (vertical format publications that remain visible for 24 hours).



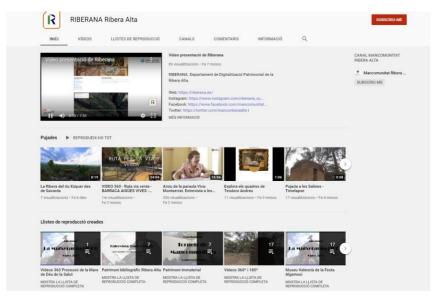




RIBERANA GUIDE 2020. Mancomunitat de la Ribera

It is a native mobile app, so it is recommended to optimize images for mobile viewing (1: 1 format, attractive color images...). It has a younger user profile than that of Facebook. We will use a closer and more casual tone.

Youtube



39. Riberana's Youtube

We will use this video platform regularly to publish videos that we want to put on the web or share in virtual visits. It is very agile and allows the publication in high quality (4k and higher) and the publication of videos in 360. It is not only a video platform, since it is also a social network, so we must take advantage of and correctly tag the videos , establish collections, cards recommending other videos, and take care of the descriptions, to make the most of the possibilities it offers as a space for dissemination

Messaging: email, WhatsApp

We will use existing channels (such as the organization's newsletter) to publicize the most outstanding publications from the department. From time to time, we may collect information from certain users who exclusively share certain content, through messaging channels such as WhatsApp or Telegram. It is a space with great possibilities, but in order to function properly, it must have an updated and detailed CRM.

LinkedIn

Social network used in the work and professional environment. From time to time, we will take advantage of the profile of the organization (Mancomunitat de la Ribera Alta) to promote some content that is of interest to the users of this network (from a publication or prestigious recognition related to the Riberana project, to the publication of a call).







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

12.5. SCHEDULE

According to the proposed objectives, the website will be the "base camp" and all the campaigns will have as their final objective visits to the website, seeking to improve and increase the base of followers, establishing relationships with potential customers and seeking a customer experience that be positive. Social channels will enhance two-way communication with our community.

The publication calendar, the Riberana production calendar and the promotion of new digital objects will be closely linked. In addition to the activity related to the current situation of the organization, a calendar that responds to the need to offer quality content as demanded by our target audiences is necessary.

The social media schedule will be in accordance with the digitalisation work schedule. In accordance with the criteria established in this guide, and in order to grow the repository of digitized heritage, draw a forecast or "road map" within 6 months, to digitize elements, in both the documentation, production, post-production process and publication, is required.

It is proposed to use an online teamwork tool that allows monitoring of each project, being able to see schematically the status of each project and the assignment of tasks. The Trello card tool can serve this objective, allowing cards sharing between boards such as the proposed Road Map, or a production board that includes tasks related to each digitalisation, such as its documentation, production or post-production.

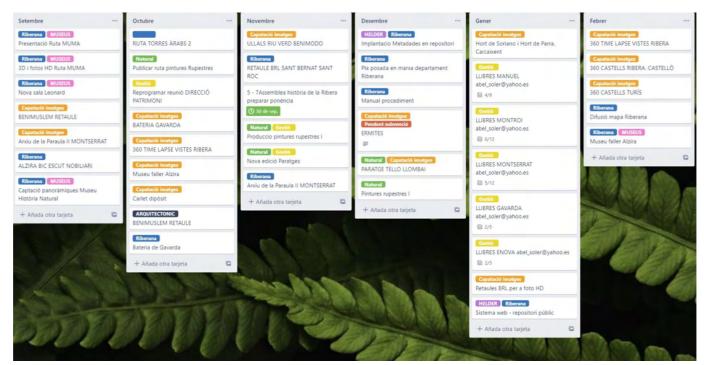






RIBERANA GUIDE 2020. Mancomunitat de la Ribera

The Road map board shows, in this case six months ahead, what will be the patrimonial elements that will be or is being worked on, in order to plan the resources available to the digitalisation department and the organization of the team that makes it up.



40. Schedule - Road Map 6 months with Trello







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

Along with this production schedule, it is proposed to have a publication calendar on social networks, in order to achieve greater impact and dissemination of the project and the content created for Riberana. A maximum publication frequency of once a day is proposed, seeking the hours of greatest participation and interaction of audiences. To discover which are these hours of greatest engagement, it is proposed to use A / B test systems, and to publish in the morning and afternoon, during lunch breaks, and connect with current affairs and conversations on the web.

Having generic publications that allow timeless publication and nourish our time line content on social networks is recommended. They are the so-called "fridge contents", whose message and structure will respond to the final desire to attract the attention of our potential audiences and attract visits to our website.

Next, a draft of the monthly publication is proposed in a generic way to keep our social networks nourished with content for a month, anticipating a weekly premiere in Riberana (it can be a large Virtual visit, or a photograph or video included in any visit that we want to highlight). Content of third parties, from our own organization, or present part of the work "behind the scenes" must also be promoted. The following page shows a generic proposal for a monthly schedule for publication on our profiles and social media pages.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Reminder element digitized: archaeological	"In process": Examples of work, inside, etc.	Content of interest of third parties.	New element in #Riberana: visit, video, 3D, etc.	Heritage natural: Reminder	Survey	
Reminder element digitized: Bibliographic	"In process": Examples of editing work	Share Content of mancomunitat	New element in #Riberana: visit, video, 3D, etc.	Heritage natural: Reminder		
Reminder element digitized: archaeological	"In process": Examples of work photographs	Content of stakeholders	New element in #Riberana: visit, video, 3D, etc.	Heritage natural: Reminder	Enigma or game	
Reminder element digitized: museum	"In process": Examples of work	Content of interest of third parties.	New element in #Riberana: visit, video, 3D, etc.	Heritage natural: Reminder		

Table 7. Social media posts schedule







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

13. COLLABORATION AGREEMENTS WITH OTHER ADMINISTRATIONS

It is convenient to make agreements with different entities to collaborate in the digitalisation of local heritage, in order to streamline work and strengthen long-term relationships. It allows facilitating access and joining forces in this task. In this way, the Mancomunitat de la Ribera Alta has signed several agreements with Town councils of the Ribera Alta region to facilitate the digitalisation work, to take advantage of the existing documentation, study and digitalisation work as well as to facilitate access and interaction between both parties and the technicians in charge of the project.

La Mancomunidad de la Ribera Alta lanza "Riberana", el repositorio digital del patrimonio comarcal



41. Signature of the agreement for digitalisation between the Mancomunitat de la Ribera Alta and the city council de Alzira

Another of the agreements signed by the Mancomunitat de la Ribera Alta regarding digitalisation was formalized with the Universitat Politècnica de València UPV, with the intention of sharing the work related to architectural study and digitalisation related to various towers of Ribera.

This type of agreement establishes a framework for collaboration between administrations, producing optimal digitalisation results and setting the strategic lines to follow and, finally, benefiting the public in terms of the agreed matters.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

This type of agreement streamlines the digitalisation process and facilitates communication and the work of mixed teams between the two administrations that sign the agreement. In this way, since there is an express collaboration, it allows to program the actions in the long term and to participate in projects of greater scope, with greater ambition, and allows working in coordination with large municipalities, which also have a lot of heritage.

This guide shares a text proposal that can be used by other administrations when looking for a model to follow to reach similar agreements to consolidate this type of collaboration in writing (Annex I).







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

14. MEETINGS WITH REPRESENTATIVES OF THE REGIONAL GOVERNMENT



42. Meeting of the president of the Mancomunitat, Txema Peláez, with the Deputy Director of Heritage , Antoni Bravo, and the ethnology technician of the General Directorate of Culture and Heritage of Generalitat Valenciana

In the development of the local heritage digitalisation project, the Mancomunitat de la Ribera Alta has held various meetings with representatives of the Generalitat Valenciana, in order to present the result of this project initiated thanks to the participation in the Interreg Europe CD- Eta project. It is an initiative that is unprecedented at the local level, and that is why the Mancomunitat wishes to be able to contribute its experience so that other associations and local administrations can carry out projects to digitize their heritage, with the support of the Valencian government.

The president of the Mancomunitat, Txema Peláez, in the meeting held with the Deputy Director of Cultural Heritage, Antonio Bravo, of the Department of Education, Culture and Sports of Generalitat Valenciana, in October 2020, stated this. The innovative Riberana project is considered inspiring to open lines of support to focus on the digital preservation of Heritage.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



43 Meeting of the Mancomunitat with Jordi Juan, secretary of innovation and digital transformation

Riberana also shared his experience with the Regional Secretary for Innovation and Digital Transformation, Jordi Juan, in a meeting held in February 2020. This body, dependent on the Department of Innovation, Universities, Science and Digital Society, is responsible for technological innovation and promotion of innovation projects from the municipalities. Riberana's experience was considered of great interest to be used by other local entities.

The Riberana project seeks to promote the dissemination of digital Heritage and the positioning of municipalities as a claim and engine of opportunities in the digital environment thanks to this repository. During the restrictions derived from the covid-19, the possibilities of having tools such as virtual visits or elements for the dissemination of culture for purposes as diverse as education, research, tourism or leisure have been proven.



MANCOMUNITAT RIBERA ALLTA

MANCOMUNITAT DE LA RIBERA ALTA



RIBERANA GUIDE 2020. Mancomunitat de la Ribera

BIBLIOGRAPHY

- Ana Estrelles Ferrando, A., José Manuel Martínez García, JM i Serra i Rodríguez, JJ
 (2007) Guia del patrimoni rural de la Ribera Alta. Mancomunitat de la Ribera Alta Confederació Hidrogràfica del Xúquer.
- Beltrán, SUNDAY (2007) "El proyecto de Digitalización del archivo ducal de Medina Sidonia: la documentación del marquesado de los Vélez". Revista ANABAD Múrcia, n. 7, pp 3-10.
- Biblioteca de la Universitat Complutense de Madrid (2016) Plan de Digitalización
- British Library. Preservation Advisory Centre
- Cinema Project Toolkit. *Guidelines for digitalisation* https://www.cineg.org/
- Digital Single Market. European Commission (2016). *New Europeana Collections websitebrings people closer to culture*.
- Doran, G. T. (1981). There's a S.M.A.R.T. Way to Write Management's Goals and Objectives. Management Review, 70, 35-36.
- Foot, M (2001) British Library. Building a preservation policy. British Library Preservation Advisory Centre.
- Fundación Santa María la Real. Románico Digital http://www.romanicodigital.com/.
 [Consulta: 13/04/20]
- Generalitat Valenciana, Dirección General de Cultura y Heritage. Cultural heritage y
 Museums. Inventario General del Cultural heritage Valenciano.

 http://www.ceice.gva.es/es/web/Heritage-cultural-y-Museums/bics







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

- Lavoie, Brian y Gartner, Richard. (2013). DPC Technology Watch Report: Preservation
 Metadata [en línea]. 2nd edition. Disponible en:
 http://www.dpconline.org/docs/technology-watch-reports/894-dpctw13-03/file
- Méndez Rodríguez, Eva Mª (2002). *Metadata y recuperación de información:* estándares, problemas y aplicabilidad en bibliotecas digitales. Gijón. Trea. P. 429
- Martín, Fernando (1995): Comunicación en empresas e instituciones. De la consultora
 a la Dirección de comunicación, Ed. Universidad de Salamanca, 1995, pp. 64-95.
- Peris Albentosa, Tomàs (2005). La cultura popular. Història de la Ribera, vol. IV. Alzira.
 Mancomunitat de la Ribera Alta Edicions Bromera.
- Rojas, Pedro y Redondo, María. (2013) Cómo preparar un plan de social media marketing. Editorial Gestión 2000. Madrid.
- Susana López Albert, Susana i López Caballero, Lídia (1999). Guía del patrimoni arquitectònic de la Ribera Alta. Mancomunitat de la Ribera Alta.
- UNESCO. 2002. Directrius per a projectes de digitalització de col·leccions i fons de domini públic. [online]. Disponible a: http://www.mcu.es/archivos/docs/pautas digitalizacion.pdf [Consultat: 13/04/20]
- Wolf, Peters, Justrell, McIlwaine, Varlamoff (2002) (Traducció revisada en 2014)
 Directrices para proyectos de digitalización colecciones y fondos de dominio público,
 en particular para aquellos custodiados en bibliotecas y archivos. UNESCO







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

ANNEX I. Collaboration agreement model

Collaboration agreement between (PART A) and the Mancomunitat de la Ribera Alta for heritage digitalisation (place and date)

Heritage digitalisation
(place and date)
BY AND BETWEEN
(name of the representative of the Mancomunitat de la Ribera Alta, institution he/she represents) with ID number (), residing at (), LA MANCOMUNITAT, assisted by the secretary of the same ().
And, (name of the representative of (PART A, institution he/she represents)
with ID number (), residing at (), INSTITUTION, assisted by the secretary of the same, ().
WHEREAS everyone recognizes the sufficient legal capacity to sign this document

STATE

- The Mancomunitat de la Ribera Alta participates together with other European regions in the CD-Eta digitalisation program. Within this framework, the Mancomunitat initiates a project to digitize the Cultural and natural heritage of the Ribera region that guarantees the conservation, dissemination and study of the Heritage of its municipalities.
- 2. The digitalisation of heritage is a process that guarantees, not only its survival, but also its free access, and allows the enrichment of databases that will be made available to researchers, public and administrations that require its dissemination.
- 3. The project is incorporating new elements in the Riberana web portal. To make this possible, the Mancomunitat will collect and process data that will result in different multimedia objects.

Therefore, the parties agree to sign this Agreement according to the following,

ARTICLES

ARTICLE 1. Purpose

The purpose of this agreement is to establish basic lines of collaboration for the digitalisation of local municipality heritage, within the global project of heritage digitalisation of Riberana.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

For these purposes, said collaboration implies the transfer of content, both videos, photographs, or others that are considered appropriate, as well as facilitating access, in the case of (PART A), to those patrimonial elements that have restricted access, as well as any other measure that is considered adequate and timely to achieve the aforementioned purpose.

ARTICLE 2. Commitments

The Mancomunitat de la Ribera Alta and Town Council of the municipality agree on the following commitments:

By Mancomunitat de la Ribera Alta:

Provide the means for digitalisation (recording, filming, etc.) and registration of the various elements.

Allow the Town Council to use the document or product resulting from the digitalisation for its dissemination

By (PART A)

- Authorize and facilitate access to places, municipal facilities and those areas for capturing or recording images, sound, etc. in relation to the patrimonial element to digitize.
- Advice for the development of content.
- Authorization to the Mancomunitat for the use and incorporation of the materials published or prepared by the City Council in relation to environmental or cultural heritage

ARTICLE 3. Collaboration agreements

This agreement establishes the general framework and methodology for the development of collaboration between the signatory administrations, by virtue of their powers as established in article 8 of Law 40/2015 of October 1 on the legal regime of the public sector.

Being the interest of both parties to proceed with the digitalisation of various assets or parts of the municipality, this framework agreement will establish criteria and general intentions, which may be specified in a subsequent agreement for the development of this framework agreement, if applicable.

ARTICLE 4. Term of the agreement

This agreement will have a duration of four years from the date of its signature and may be extended up to a maximum of four more years by unanimous agreement of the parties adopted before its







RIBERANA GUIDE 2020. Mancomunitat de la Ribera completion.







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

ARTICLE 5. Causes of resolution and monitoring of the agreement

This agreement may be resolved by mutual agreement between the signatory parties or by unilateral decision when there are justified causes, after a reliable complaint with a period of one month.

Failure to comply with the obligations and commitments acquired by the parties of this agreement will be cause for its resolution. For the follow-up, surveillance and control of the execution of the agreement, a joint commission will be created to resolve the problems of interpretation and compliance with the agreement that may arise.

ARTICLE 6. Courts

The resolution of disputes that may arise between the parties will be subject to administrative courts.

ARTICLE 7. Law

For everything not provided for in this agreement, the general regulations governing the agreements established in Chapter VI of the Preliminary Title of Law 40/2015, of October 1, on the Legal Regime of the Public Sector, will apply.

For the record for the appropriate purposes, as proof of conformity, the parties sign this document in duplicate.

(Signatures and date)







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

ANNEX II. SOME PRESS PUBLICATIONS ON THE DIGITALISATION DEPARTMENT OF THE MANCOMUNITAT

El Museu de la Festa recibe el triple de visitas virtuales

El número de visitantes online aumenta un 228 % respecto al año pasado en Algemesí -Se han interesado ciudadanos de Alemania, México, Reino Unido, Argentina, Brasil, Suiza, Uruguay, Francia, Perú o Libia

R.A. | 07.05.2020 | 14:12

El Museu Valencià de la Festa de Algemesí ha abierto durante el mes de abril a través de las pantallas, gracias a la visita virtual elaborada por la Mancomunidad de municipios de la Ribera Alta. Unos 3.152 usuarios pasearon por las salas del museo durante el mes de abril, un aumento del 228% respecto al mes anterior. En marzo, pasaron por la versión digital del Museu de la Festa unos 1.382 visitantes.



El Museu de la Festa de Algemesi. Vicent M. Pastor

La visita virtual se puede hacer a través del enlace

bit.ly/VRMuseuFestaVAL, la web "Riberana" del departamento de Digitalización de la Mancomunidad, la página del Museo de la Fiesta y las redes sociales. Permite conocer las estancias del museo a través de vistas panorámicas, y cuenta con videos en 360 grados de las diferentes danzas de la Festa (grabadas en la calle Berca) con fotografías e información contextual.

Todo junto, ha despertado el interés del visitante de manera notable durante el mes de abril de confinamiento: cada visitante vió 9,36 páginas por visita (unas 29.500 en total), mientras que en marzo fueron 4,13 (5.705 páginas). Las jornadas con más visitantes fueron precisamente el miércoles y jueves de la Semana Santa, con 594 visitas el día 8 y 340 el día 9.

La obligación de permanecer en casa ha sido la excusa perfecta para poner en valor este recurso en línea, en marcha desde finales de enero. Se trata de una herramienta muy positiva para conocer el patrimonio de Algemesí en el caso de que no se pueda visitar físicamente el museo. Las visitas online en el museo no sólo han venido de los ciudadanos de la Ribera. También han pasado por ella visitantes de países como Alemania, Portugal, México, Colombia, Reino Unido, Bélgica, Argentina, Estonia, Países Bajos, Brasil, Ucrania, Suiza, Uruguay, Francia, Austria, Rumania, Perú, Andorra, República Checa, Venezuela, Bulgaria o Libia.

El concejal de Turismo Edgar Bresó ha valorado muy positivamente estas cifras y ha manifestado su intención de que esta "sea la primera piedra hacia una nueva realidad del turismo en nuestro pueblo que nos obligará a cambiar las experiencias que, desde Algemesí, estamos ofreciendo a nuestros visitantes "

La visita virtual ha sido posible gracias al trabajo conjunto del Museu Valencià de la Festa y la Mancomunidad de la Ribera Alta, que participa del proyecto Interreg-Europe CD-Eta para hacer universal el acceso al patrimonio comarcal.

44. Levante EMV 07.05.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

32 DOMINGO, 12 DE JULIO DE 2020

La Ribera

Riberana. La plataforma creada por la Mancomunitat de la Ribera Alta para mostrar al mundo a través de internet el patrimonio material e inmaterial de la comarca sigue creciendo. Técnicos del área de digitalización se han desplazado a las montañas de Tous para tomar imágenes y diseñar una visita virtual que ayude a divulgar pinturas rupestres.

Arte rupestre a golpe de clic

▶La Mancomunitat digitaliza las pinturas prehistóricas de un abrigo de una cueva de Tous para incorporar una visita virtual al repositorio digital que promociona el patrimonio de la comarca

P. F. ALZIRA

■ La Mancomunitat de la Ribera

Il La Mancomunitat de la Ribera Alta pondrá las pinturas rupestra del barranco de Pertecates del Douranco de Pertecates del Tous al alcance de cualquier persona interesada en conocor las representaciones gráficas más antiguas de la comarca a través de su inclusión en el repositorio digital del pafrimonio, Riberana, que ya ofrece la posibilidad de sumergirse a través de visitas virtuales en algunos de elementos más representativos de la comarca, ya sean bienes inmuebles o espacios naturales. Todo a golpe de un clic. El ente comarcal alimenta poco a soco los fectos pocos espacos naturales en apoco es enteres pocos espacos naturales en apoco en enteres pocos espacos naturales en apoco es enteres pocos espacos en enteres pocos espacos en enteres pocos espacos enteres pocos enteres pocos enteres pocos enteres pocos enteres pocos enteres pocos espacos enteres pocos en marcal alimenta poco a poco los fondos de este poco los fondos de este portal de promoción universal y ap repara la inclusión de estas pinturas de uno de los abrigos que, comunos 6.000 años de antigüedad, representan uno de los vestigios más antiguos.

Dos técnicos del departamento de digitalización de la Mancomunitat, a compañados por el arqueólogo de Tous Ximo Martorell, realizaron una visita de tralizario ma visita de tralizario m

Ious XImo Martorell, realizaron una visita de trabajo a la zona la semana pasada, con el la zona la semana pasada, con el din de recoger imágenes con las que preparar la visita virtual a la zona que incluya la difusión de distintas pinturas rupestres halladas en este abrigo por Ximo Martorell.

Escenas de caza y guerra

El panel decorado muestra sendas escenas de caza y guerra en las que participan varios arqueros y cuadrúpedos. Estos ejemplos de arte prehistórico levantino, pertenciente al neolítico, podrán verse en un entorno digital interactivo antes del mes de septembre. Incluirá detalles de las distintas pinturas halladas, mediante foto grafias de alta resolución e imágenes en 3D. La finalidad es difundir el patímonio artístico y cultural nes en 3D. La finalidad es difundir el patrimonio artístico y cultural delazona, a través de distintos ca-nales (redes sociales, web), para que toda la población pueda co-nocer la riqueza de estas repre-sentaciones artísticas primige-nias.

estas representaciones que, por otro lado, requieren de medidas de preservación física como por ejemplo su vallado perimetral, un primer paso imprescindible para su futura musealización y recono-cimiento de su relevancia. El trabajo de digitalización en este abrigo de Pertecates, en Tous,

cuenta con la autorización y cola-boración de la dirección general de Patrimonio. En la toma de imá-genes, los técnicos de la Manco-munitat estuvieron acompaña-dos por el arqueólogo Ximo Mar-torell, gran conocedor de estos trabajos que dedicó su tesis doc-toral al arte rupestre de la zona. Estas pinturas forman parte del

El portal ha añadido durante el confinamiento el paraje de Las Salinas de Manuel y la sala Teodoro Andreu del MUMA

conjunto de Arte Rupestre del Arco Mediterráneo de la Penínsu-la Ibérica, declarado patrimonio de la Humanidad por la Unesco.

Nuevos atractivos

El repositorio digital de Riberana
permite conocer distintos elementos del patrimonio cultural y
natural de la Ribera Alta, sin importar la ubicación o el momento
en el que acceda el visitante. Durante el confinamiento impuesto
por la alerta sanitaria, Riberana ha
incorporado nuevos elementos al
catálogo, como el Paraje Natural
Municipal de las Salinas de Manuel, que ya se puede visitar de
forma virtual. Mediante fotografías y textos, permite realizar un iorma virtual. Mediante fotogra-fías y textos, permite realizar un recorrido por la senda que condu-ce hasta la Pared del Moro y cono-cer la flora, fauna y diferentes ele-mentos constructivos. La ruta está accesible en valenciano, castella-

Calvario o la

fuente. Otros elemen-Otros elementos estrenados en
formato virtual
cuando los museos aún permanecían cerradosson la sala del
MUMA de Alzira
dedicada al pintor
Teodoro Andreu,
discípulo de Joaquín Sorolla. La visita se estrenó el 18
de mayo con motivo
del dís internacionad
el los museos.

de los museos.
La visita completa
al MUMA, gracias a
la colaboración entre
la Mancomunitat de
la Ribera Alta y el departamento de Museu, Patrimoni
i Turisme del Ayuntamiento de
Alzira, será presentada en septiembre. Será un tour virtual con
imágenes de alta resolución y numerosos puntos interactivos (fotografias, imágenes 3D, vídeos e
información contextual) disponibles en todas las salas que componen el museo municipal.

Entre los elementos más recientes estrenados en Riberana también destaca l'Arxiu de la Paraula Viva. destaca l'Arxiu de la Paraula Viva. Se trata de entrevistas a personas mayores de Montserrat realizadas por el ayuntamiento, a través de la Agència de Promoció del Valencia Aviva Montserrat en colaboración con el archivo municipal, y digitalizadas por Riberana. Dos primeras entrevistas a vecinas del municipio ya han sido publicadas. En ellas hablan de temas cotidianos de su infancia como los años en la escuela, el trabajo, las nanas y canciones populares.



EL TRABAJO DE CAMPO DEL ARQUÉOLOGO de Tous.

Ximo Martorell ha permitido inventariar con los años decenas de abrigos con pinturas rupuestres.
Trabajos de digitalización en el abrigo que Riberana incorporará en septiembre a su repositorio. O LINIM

Récord de visitantes durante el confinamiento

El recorrido por las torres árabes en 3D y el Museu de la Festa de Algemesí generan el mayor número de visitas

P. F. ALZEM

La imposibilidad de visitar
físicamente museos o parajes
naturales durante el confinamiento impuesto por el coronavirus ha potenciando tours
virtuales como los elaborados

por el departamento de digi-talización de la Mancomuni-tat de la Ribera Alta. En las dos primeras semanas, 14 al 31 de marzo, las visitas a la web se multiplicaron por diez, ba-tiendo el récord de visitantes. El elemento que despertó mayor interés fueron las to-rres árabes en 3D, con la Torre Mussay la Torre de la Piaza, en Benifiaió, ola Torre Racef y los castillos de Aledua y Montroi. En segundo lugar el Museu Valencià de la Festa, que en

abril llegó a 3.152 usuarios, el triple que en marzo. Graclas a Riberana y a la Mancomunitat, el museo de Algemesí permanece abierto las 24 horas del día en su versión digital. En las últimas semanas ha habido un creciente interés en los nuevos elementos de Riberana, como son la ruta de las Salinas, o la sala de Teodoro Andreu, del MUMA.

La Mancomunitat activó la experiencia de Riberana a partir de la partiricipación en el proyecto europeo Interreg abril llegó a 3.152 usuarios, el

proyecto europeo Interreg Europe Cd-Eta, que destaca en su web la experiencia de Riberana durante el confina-miento, con la apertura «vir-tual» de museos y espacios

45. Levante EMV 12.07.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

La Ribera Alta digitalitza el patrimoni per a fer-lo més universal

Notícies Societat | 28/01/2020 14:40









Recreacio 3D del Pont del Rei de Gayarda en el web riberana manra org / Mancomunitat de la Ribera Alta

Recreacions en tres dimensions de les joies del patrimoni de la Ribera Alta, narracions sonores amb les variants locals de cada municipi, recorreguts virtuals pels principals espais naturals o vídeo 360 que ofereixen una experiência immersiva de representacions populars com la muixeranga. Són alguns dels elements que s'han començat a digitalitzar en el marc de Riberana, un projecte europeu amb participació de la Mancomunitat de la Ribera Alta, que aspira a fer més accessible i universal el patrimoni natural i cultural de la comarca.

Els resultats de la primera fase del programa Interreg Europe Cd-Eta es poden visitar en el web riberana, manra, org i són fruit de la faena de digitalització del recentment creat departament de patrimoni de la Mancomunitat. Els elements que mostra són multimèdia i hipertextuals, poden vincular-se entre si i permeten afegir informació a diferents nivells. El web és accessible en quatre idiomes: valencià, castellà, anglés i francés.

Les primers digitalitzacions estan distribuides en cinc categories, sota criteris científics i de promoció turística. A través del portal web els visitants ja poden fer un recorregut virtual pel Paratge de la Murta (Alzira), el Museu valencià de la Festa (Algemesí), diverses torres àrabs a la comarca (Torre Mussa i de la plaça, a Benifaió, Castell de Montroi i Castell d'Alèdua, a Llombai, i la torre Racef d'Almussafes), el Pont del Rei de Gavarda o el tram del riu Xúquer epr Sumacàrcer. Així mateix, el portal ofereix una experiència multimèdia amb el llibre "La Ribera: Imatge i Territori" o el patrimoni sonor dialectal que es recullen en l'interactiu 'Les Veus d'Una Ribera'.

El catàleg, que inclou també vídeos 360, documents i galeries fotogràfiques, anirà creixent de manera gradual en els pròxims mesos. Amb aquest objectiu la Mancomunitat i l'Ajuntament d'Alzira han signat un conveni de col·laboració que pemetrà la digitalització de elements significatius del patrimoni alzireny.

46. Web de Àpunt 28.01.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera





El contingut expositiu del MUMA està en procés de digitalització

La Mancomunitat de la Ribera ha postat en marxa el portal Riberana on hi ha la possibilitat de conéixer diversos elements del patrimoni cultural i natural de la comarca. La ciutat d'Alzira aporta actualment al portal el Paratge Natural de la Murta i el monestir de Santa Maria, sens dubte un dels elements patrimonials més característics de la ciutat.

Estos dies el Departament de Patrimoni de la Mancomunitat està digitalitzant tots els elements que es custodien al MUMA, la qual cosa derivarà en el fet que prompte podrem tindre el lliure accés universal del patrimoni municipal en l'espai Riberana.

Isabel Aguilar, regidora de Patrimoni Cultural, ha estat supervisant les tasques de digitalització que tenen com a finalitat oferir un servel molt didàctic des del punt de vista tant turístic com cientific, a més el portal Riberana estarà en actualització contínua i permet l'accés en valencià, castellà, anglès i francés. La digitalització i catalogació dels béns permetrà la seua preservació, difusió i posada en valor.

"Una vegada es finalitze la digitalització dels elements patrimonials del MUMA es farà la mateixa tasca en la Casa d'Alós, així com en el Museu Faller, la qual cosa permetrà que qualsevol ciutadà a través de la plataforma tinga accés a tots els continguts dels nostres museus, que podran ser consultats per particulars, així com per experts en patrimoni de qualsevol país del món a través de les noves tècniques de continguts en 3D", segons la regidora de Patrimoni Cultural.

Els professionals d'aportar continguts a Riberana han assenyalat a la regidora que el portal complix la funció de conservació (models amb representacions fidedignes, com és el cas dels models 3D), documentació, accés (permet la consulta sense limit geogràfic o horari) i difusió. Els elements que mostra són multimèdia i hipertextuals, la qual cosa permet afegir informació a diferents nivells i relacionar elements entre ells.

Un pas més, gràcies a la Mancomunitat de la Ribera, en la tasca marcada per a esta legislatura des de les regidories de Patrimoni Cultural i Turisme per tal d'apropar l'oferta patrimonial i turística d'Alzira.

47. Tot Alzira 13.02.2020













RIBERANA GUIDE 2020. Mancomunitat de la Ribera

La Ribera - La Costera

La comarca pretende extender su experiencia de digitalización a otros territorios



Un instante de la reunión celebrada ayer. lp

Jueves, 13 febrero 2020, 23:29

■ f ♥ ② … □

redacción. El secretario autonómico de Innovación y Transformación Digital, Jordi Juan, conoció de primera mano el proyecto de digitalización de patrimonio de la Mancomunidad de la Ribera Alta denominado 'Riberana'. Se trata de una iniciativa innovadora que permite el acceso universal y abierto a elementos del patrimonio de esta comarca.

El presidente de la Mancomunidad, Txema Peláez, transmitió al representante autonómico la voluntad que 'Riberana' supere los límites de la comarca y transferir la experiencia a otras mancomunidades y ayuntamientos para aprovechar el trabajo hecho hasta ahora en la Ribera y poner en marcha departamentos de digitalización de patrimonio.

https://www.lasprovincias.es/ribera-costera/comarca-pretende-extender-20200214232956-ntvo.html

48. Las Provincias. 15.02.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

VÍDEO | La Ribera Alta digitalitza el seu patrimoni



El patrimoni de la Ribera Alta ja és accessible a través d'Internet gràcies al projecte de digitalització llançat per la mancomunitat de municipis. Riberana permet a l'usuari contemplar monuments, museus i visitar rutes de la comarca, amb realitat virtual i augmentada.

49. Web de Àpunt 01.02.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

LAS PROVINCIAS **PROMOCIONES**

i DESCÚBRELAS!

Comunitat

La Ribera - La Costera | Especial Comarcas

La comarca difunde su patrimonio cultural y natural de forma virtual



Firma del convenio entre ambas administraciones. / LP

La digitalización se enmarca en un proyecto europeo de conservación y la Mancomunitat firma un convenio con Alzira para seguir avanzando

A. T. ALZIRA. Miércoles, 29 enero 2020, 00:25

El portal Riberana nace con el objetivo de poner el patrimonio natural y cultural de la Ribera Alta al alcance de todos de forma virtual. Se trata de un proyecto pionero llevado a cabo gracias al programa 'Interreg Europe Cd-Eta' del que participa la Mancomunitat de la Ribera Alta.

El ente comarcal permite así el libre acceso universal del patrimonio natural y cultural de los sus pueblos, gracias al espacio Riberana. Este repositorio online incluye visitas virtuales, elementos 3D o panorámicas, vídeos 360. Los primeros objetos digitales que ya se pueden ver en

50. Las Provincias 29.01.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera

El confinament dispara les visites a la web «Riberana»



RIBERANA

Riberana: repositori digital de patrimoni de la Ribera Alta





51. El Seis Doble. 05.04.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



52. El Seis Doble. 22.10.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



53. Las Provincias. 22.10.2020

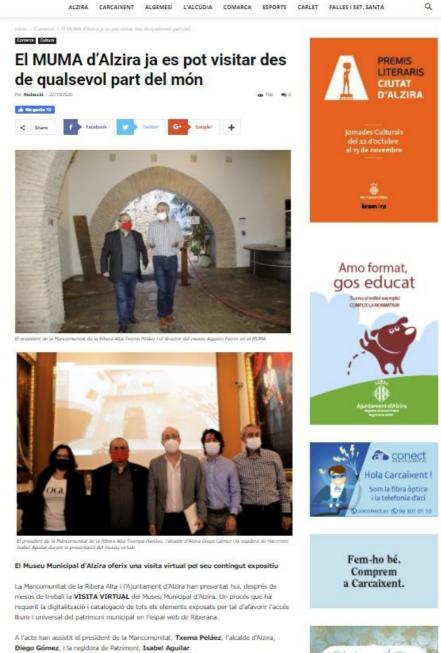






RIBERANA GUIDE 2020. Mancomunitat de la Ribera





54. Ribera Express. 22.10.2020







RIBERANA GUIDE 2020. Mancomunitat de la Ribera



CONTACT



Twitter: RiberanaXuquer

Facebook: facebook.com/RiberanaXuquer

Instagram: instagram.com/riberana_xuquer/

Calle Taronger, 116, Alzira. 46600 (València)

① Telephone: +34 96 241 41 42

Victor Rey Calatayud (manager of the Heritatge Digitalisation Departement)

