OUTPUT T2.2
Pilot Action (P13)

Report

Title	Output T. 2.2
	Pilot Actions for preserving and management of natural and cultural heritage and resources developed and/or implemented
Date	20.05.2022
Venue	Rasova

Implementing partner(s)	UAUIM & INCDT
Name of Pilot site	SACIDAVA
Project ID	DTP3-1-359-2.2

General description:

The VR implementation has occurred during the Workshop Visibility Measures in the village of Rasova. As the Romanian pilot site finds itself in a very remote zone, but also in a very authentic and original natural landscape, the most suitable visibility measures were implemented in the closest village. This decision was determined by the concept of preserving the authentic atmosphere as part of the historical heritage.

UAUIM has made a conversion project on the ancient kindergarden of Rasova, transforming the old building in a small History Museum, dedicated to the pilot site of Sacidava.

The workshop has been organised in two main components: the contextualization of the pilot site of Sacidava and the 3D visualisation of the Roman constructions.

The 3D visualization has been based on 2 technologies: hologram & 3d printing.

Agenda (Workshop):

10:00 – Sosire la Rasova / *Arrival at Rasova*

10:00-10:30 – Organizarea grupurilor de lucru / *Working groups organisation*

   a. Instalarea expozitiei / *installation of the exhibition*
   b. Montarea hologramei / *the setting of the holohram*
   c. Producerea de machete ale sitului / *production of site models*
   d. Instalarea firmei luminoase / *Installation of the illuminated sign*

10:30-11:30 – Workshop

11:30 – Pauza de cafea / *Coffe brake*

11:45-13:30 - Workshop

13.30-14:30 – Pauza de pranz / *Lunch Brake*

14:30-16:30 – Workshop

16:30-17:00 – Prezentarea rezultatelor & discutii / *Presentation of the outputs & discussions*

17:00 – Plecare spre Bucuresti – *Departure to Bucharest*

Participating Partners and Stakeholders:

UAUIM; INCDT; MINAC; Municipality of Rasova

Preparatory phase:

In the preparatory phase, UAUIM has identified the possible visibility measures to be implemented on archaeological sites and the research has been delivered into a Catalogue that also included possible projects for VR installations.

Based on the research the Romanian partners took the decision avoid interacting directly with the site, in order to preserve the unique and authentic landscape and to prevent the degradation to intensive tourism.

Once the project of the small history museum in Rasova was accomplished, the partners decided to inaugurate the museum during the Workshop Visibility Measures and the first exhibit to be a 3D installation with a hologram of the archaeological site.

UAUIM create the furniture project, it was produced in Bucharest and it was installed during the Workshop. We also acquired a 3D printer to be used during the Workshop and to have small 3D models, at different scales of the Sacidava Fortress.

Project of the hologram furniture   © Dragoş Dordea & Bogdan Ispas 2022

Implementation and Testing approach:

The implementation of the VR has reached 3 variants: the hologram, the 3d printing and the QR codes.

The hologram has been produce through an installation, especially designed for this occasion. It shows the 3D reconstruction of the pilot site and it can be observed 360° in a plexigalas pyramid. The 3D reconstruction is has been transferred into an animation and introduced into a video editing software.

The animation movie is projected from a LED horizontal smart screen (108 cm) into the 4 sides of the reversed pyramid (55x55cm; 9x9cm, h=25.7cm) and inside the pyramid the complete 3D image of the Sacidava fortress appears (an shown in the annexes). The installation can be used in the future to show any further 3D reconstructions or artefacts. The hologram will remain in the small new History museum of Rasova as main attraction.

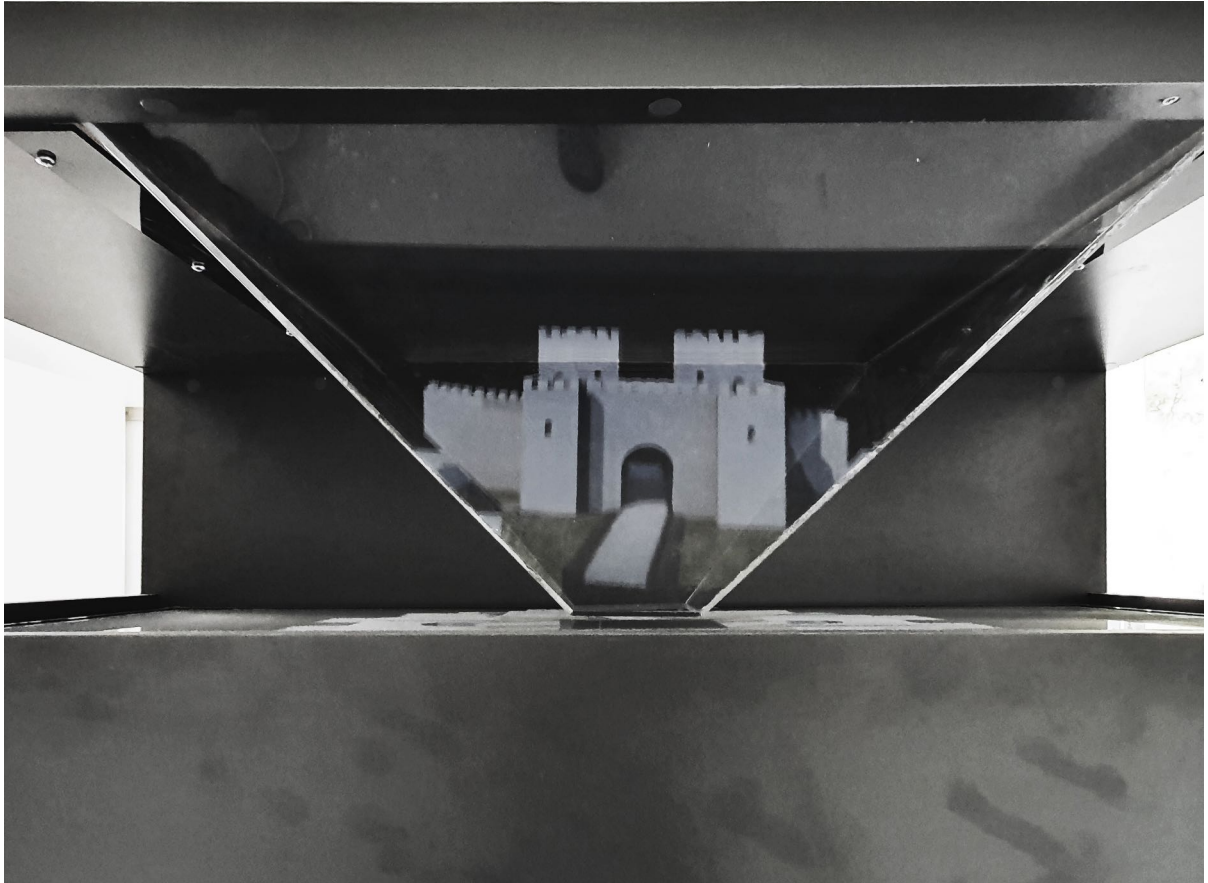The furniture of the Hologram will also host the QR code sending to the online VR.

3D models of the Roman site of Sacidava were printed during the Workshop, with a 3D printer especially acquired for this occasion. We printed models of the entire site and single elements as the tower of the main gate.

The QR codes were also exposed on the furniture & poster of the exhibition The Danube Limes in Romania, hosted by UAUIM in Bucharest, between 21.06.2022-26.06.2022, wit the occasion of the Roman Danube Limes Days.

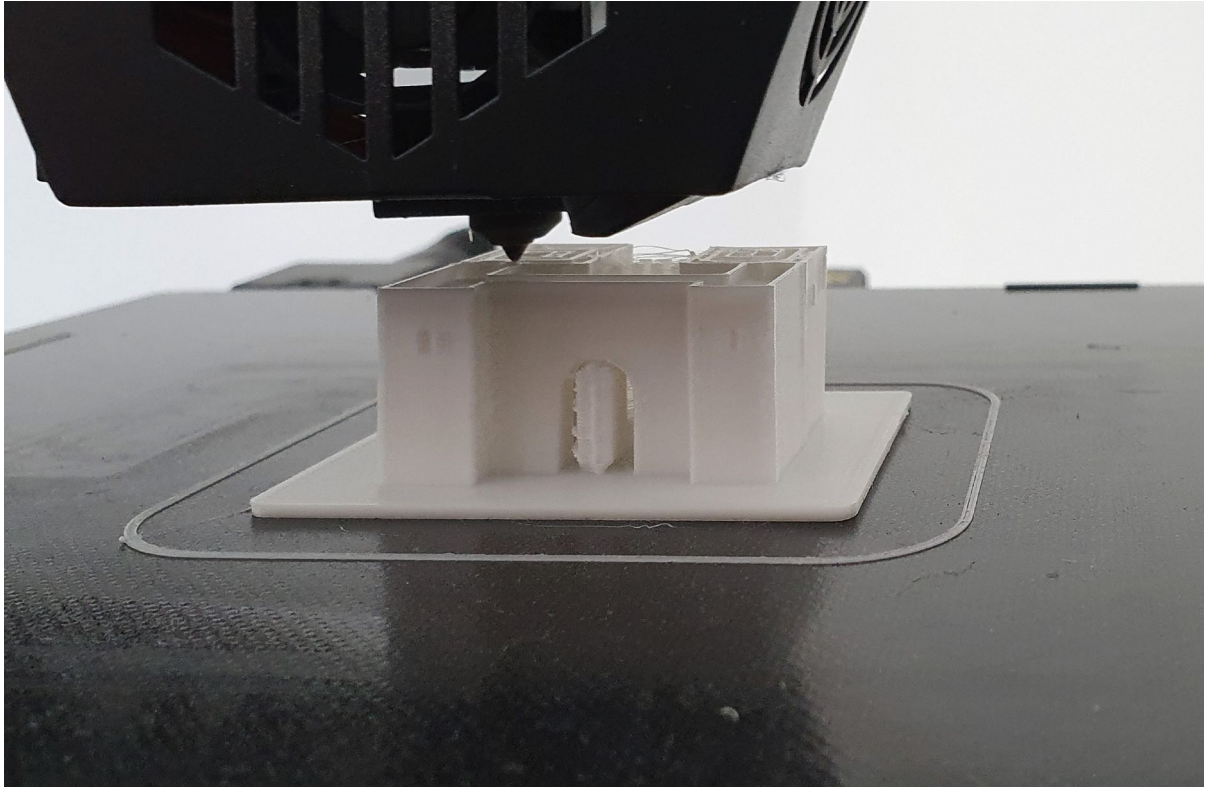Installation of the hologram   © Ana-Maria Machedon 2022

Hologram of Sacidava fortress © Ana-Maria Machedon 2022
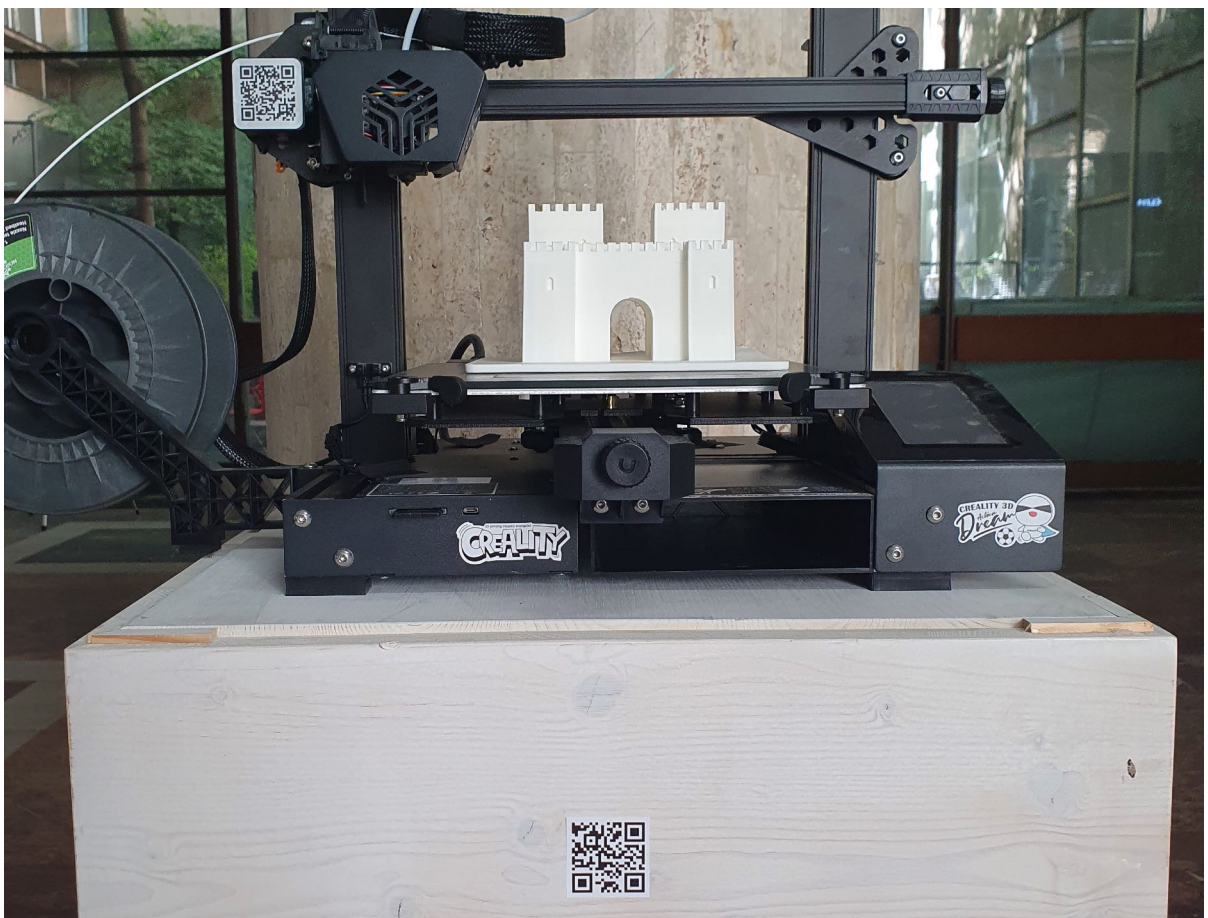

Printing of 3D models of Sacidava fortress during the workshop © Adrian Rădulescu 2022

Printing of the Sacidava fortress gate   © Ana-Maria Machedon 2022

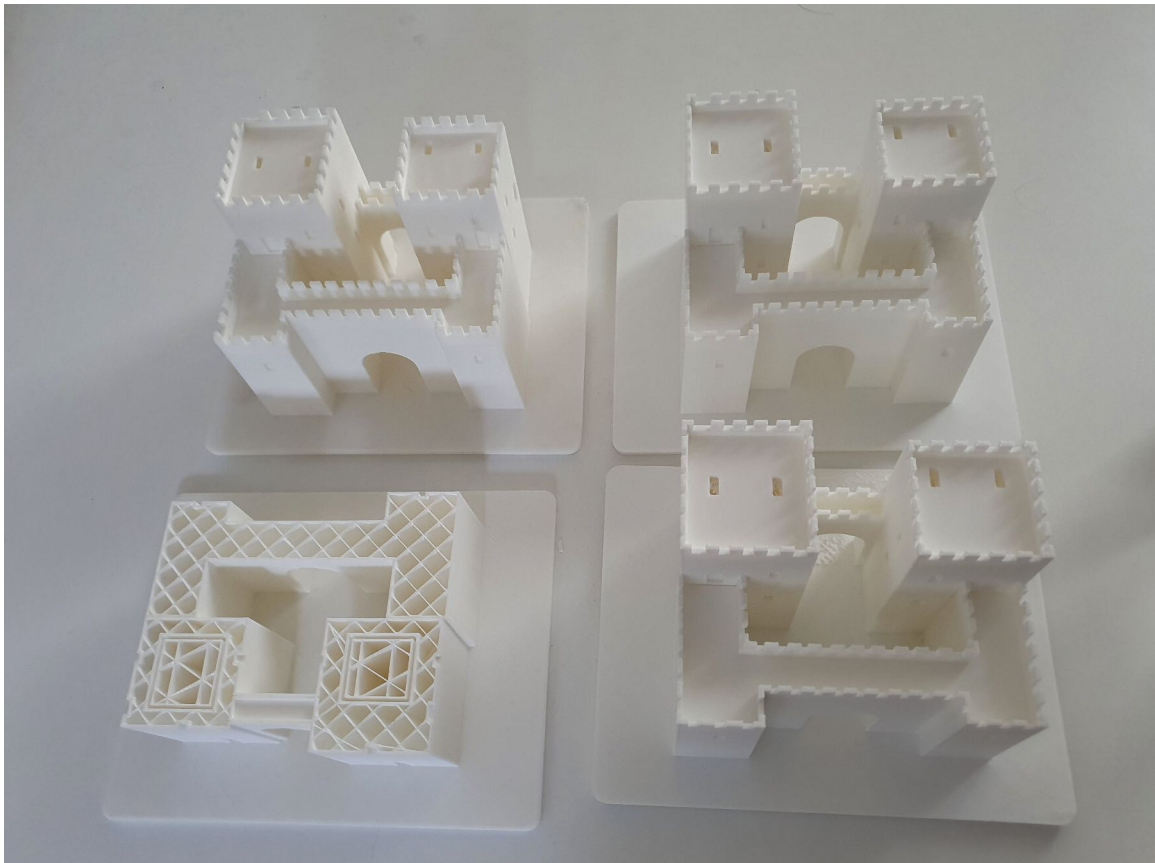Printing of the Sacidava fortress gate & the QR code   © Ana-Maria Machedon 2022

QR codes at the RDLD Exhibition © Ana-Maria Machedon 2022

QR codes - stickers to be further distributed   © Ana-Maria Machedon 2022

Models printed during the LDLD   © Ana-Maria Machedon 2022

Dissemination

The implementation of the VR was presented at the following events:

- The Workshop Wisibility Measures – Sacidava – in Rasova, 20.05.2022
- The 2nd. LFG, 20.06.2022
- The exhibition The Danube Limes in Romania, hosted by UAUIM in Bucharest, , wit the occasion of the Roman Danube Limes Days 21.06.2022-26.06.2022

Target groups (Workshop):

Integration and use of the Output by the target group:

All type of participants used the 3 methods of 3D visualization with a particular and significant interest towards the hologram and the 3D Printing

Number and profile of participants in total: 17(Workshop); 13(LFG); 74 (RDLD)

Local public authorities, national public authorities, High education & research, schools, museums, NGO,s &interest groups, general public

Target groups reached through the pilot action (total from 3 events):

Target groups (in accordance to AF section C.2.2)	Target value	Institutions/interest groups/key persons present at the event
local public authorities	2	
regional public authorities		
national public authorities	2	
higher education and research	5	
education/training centres and schools	1	
SME (small and medium enterprises)	4	
general public	1	
interest groups including NGOs	3	
international organisations under national law		
international organisations under international law		
sectoral agencies		
infrastructure and (public) service providers		