

## THEMATIC SESSION

Archaeology and digital technologies -

Exchange of best practices, with particular reference to the European Convention on the Protection of the Archaeological Heritage (revised, Valletta, 1992)

- POLAND -



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## Digital technologies in the implementation of the Valletta Convention. Poland.

## 1. Selected Initiatives

In archaeological heritage management digital technologies are effective means for keeping up all kinds of inventories as required in the Art. 2 of the Valletta Convention. These digital resources can be used in spatial planning processes, thus attributing to the integrated conservation of archaeological heritage, as specified in Art. 5. Also, the databases for collection and the web portals for presentation reflect Art. 7 of the convention.

In Poland, such a central solution has been created by the National Institute of Cultural Heritage. With regard to archaeological heritage, its <u>Central Database on Monuments</u> (presented at <u>www.mapy.zabytek.gov.pl</u>) includes information on:

- ca. 8000 archaeological sites from the register of monuments;
- over 440 000 sites from the national inventory created within the program of Polish Archaeological Record;

PAR has been operating since 1978, aimed at first at recording all archaeological sites visible on the surface. The sites have been identified mainly on the basis of fieldwalking, but also aerial photography, intrusive research, and recently remote sensing. During the functioning of the project, it has shifted towards identifying monuments – in this case, archaeological sites worthy of preservation for future generations because of their historic, scientific or artistic values (cf. Act of 23 July 2003 on the Protection of Monuments and the Guardianship of Monuments, Art. 3).

These digital resources are still being developed. A new strategy for the systemic use of nonintrusive prospection of ACH including the concept and - in the future - creation of a new repository/database, is under development.

At the moment, this database does not have the status of a legal inventory and register of monuments, because of the binding regulations these still have to be on paper. Thus, the Central Database serves for: archiving and preservation of data, dissemination of information. It also delivers the content required by the INSPIRE Directive (protected areas).

Based on these resources, the portal for popular presentation has been created (<u>www.zabytek.pl</u>), where maps are completed with descriptions, photographs and in some cases the3D- models. The number of individual users has been growing. In 2019 there were 525 000 of them and in 2020 – almost 900 000.





Another action indispensable in archaeological heritage management, aimed at preservation of heritage, as well as collection and dissemination of scientific information, is preservation of the digital data through creation of dedicated repositories. Poland is not advanced in this field but I would like to present one initiative, namely the Digital Repository of Scientific Institutes (<u>www.rcin.org.pl</u>). This is a bottom-up initiative of several scientific institutions, created within two EU-funded projects. With regard to archaeological heritage, it includes the digitised archive of the Institute of Archaeology and Ethnology of Polish Academy of Sciences.

- 2. Future needs
- The repositories created so far are bottom-up and scattered initiatives, but we need the repositories of archaeological digital documentation (i.e. the digital heritage), preferably on a national or maybe international level. They have to be sustainable, reliable access points to data and information.
- In order to use the full potential of the deposited resources we need central GIS databases with stable funding and maintenance.
- Free access to high-resolution satellite images for the heritage service and other relevant institutions (e.g.: heritage boards, universities) will offer an opportunity for developing automated large-scale monitoring of sites (humidity, land use, vegetation, ground level changes).
- The above changes will not work unless state heritage service is digitised in terms of hardware, software and training, so that they are able to fully profit from the advantages of born-digital archaeological documentation in their heritage management activities
- Gradual shift from paper towards the solely digital archaeological process must be strengthened and enforced by respective legal provisions.
- To preserve archaeological heritage for the future we must promote digital reconstructions instead of the material ones, constructed at archaeological sites, which unfortunately still happens in Poland.
- Facilitating digital popularisation of archaeology and archaeological heritage should be carried out through dedicated funding opportunities and other incentives.
- Finally, there should be more emphasis on digital archaeology in university syllabuses.