Archaeological Information System of the CR
and its Role in Landscape Research
AIS CR – a solution to...

- ... the management of archaeological fieldwork
- ... unified collection and registering of the results of archaeological fieldwork events
- ... long term storage of the documentation and excavation reports
- ... availability of data for basic and applied research
- ... implementation of digital humanities tools
- ... sharing, presentation and dissemination of archaeological data and research results
• since 1919 – Institutes of Archaeology entrusted with the administration of archaeological research and finds => archives in Prague and Brno
• after 1990 - a series of discrete data blocks and applications
• after 2002 - the first steps to digitize the documentation
• 2012-2015 – AMCR project
  • data content harmonization
  • integration of databases and interfaces
  • review of the information contained
• since 2016 – the Roadmap of Large Infrastructures for Research, Experimental Development and Innovation of the CR

A book summarising development up to 2015 (Kuna et al. 2015; ISBN 978-80-87365-88-5)
AIS CR key concepts

(1) **strength of joint efforts (crowdsourcing):** professional community should produce data sets vital for its own future development, both in research and for heritage management.

(2) **information sharing and dissemination:** maximum (reasonable and legal) access to data for both professionals and the public (*archaeology matters!*)

(3) **influencing information workflow:** understanding archaeological field research as a dynamic iterative process of knowledge formation.

(4) **inner coherence and persistency:** creating authority files with persistent identifiers to be used in all parts of our field research knowledge (archives, museums, publications, etc.)

(5) **interoperability:** preparing the system for the possible/future cooperation with other infrastructure systems on a national and/or international level.
AIS CR „ecosystem“ ...

(1) ... database of archaeological data

(2) ... geographic information system

(3) ... API services for data exchange

(4) ... teams of experts on archaeological data collection and curation (Institutes of Archaeology of the CAS in Prague and Brno)

(5) ... SW and HW equipment for effective data management

(6) ... interfaces for data entry and presentation
http://www.aiscr.cz

AIS CR interfaces

- Prague: The City of Archaeology (MADP)
- Archaeological Atlas of the CR
- Archaeology Online
- API and back-end
- Archaeological Map of the CR (AMCR)
- Digital archive of the AMCR
Archaeological Map of the CR (AMCR)

The AMCR unites the basic archaeological infrastructure of the CR and offers tools to register fieldwork projects, collect metadata on fieldwork and their results, serves as a repository of secondary documentation and provides data for public use.

http://www.amapa.cz
Digital archive is a web application used for browsing digital documents stored in the AMCR. Its interface is fully connected to the AMCR and makes available all the archived documents including supplementary description and spatial data. Digital archive includes English thesauri.

http://digiarchiv.amapa.cz
Praha archeologická je portál, který si klade za cíl zpřístupnit archeologické prameny Prahy oborníkům i široké veřejnosti. Archeologům a jejich spolupracovníkům by měl usnadnit česť k systematickému studiu minulosti a jejímu vychování a ucelenějšímu poznání, památkové sféře přinést podklady pro rozhodování o míře nezbytné ochrany archeologických památek, podnikatelům pak informace o různých jejich záměrech.

Nejširší veřejnost má možnost prostřednictvím portálu navštívit Prahu pod Prahou, krajinou po stopách předškolské minulosti, zdělit například s objevováním důsledku neznámého, poznamenat dokonalost zapomínaných technologií a řemesel, či se seznámit s nekonanými možnostmi témat, jejichž studium archeologie nabízí.


Prague: The City of Archaeology (MADP)

A web portal with the task to provide access to archaeological sources from Prague for professionals and the public; the website enables to visit the underground of Prague and to follow in the footsteps of Prague's history.

http://www.praha-archeologicka.cz/
Archaeology Online

A gateway presenting digital information sources related to the study of the past of Czech landscape and archaeology. Its aim is to offer links to data often difficult to access, provides orientation in existing infrastructures, record-keeping systems, tools and web portals.

http://www.aonline.cz
Archaeological Atlas of the CR

The Archaeological Atlas is an accompanying service of a publication of the same name; it expands its contents in a virtual environment and presents archaeological monuments in the landscape in a popular way to the general public.

http://www.aatlas.cz
Archaeological information system of the CR 2016-2019/2022

Archaeology Online
- resources’ metadata, good practice guidelines
- summarised data for professionals (maps)

AMCR 2012-2015/2017
- registry of fieldwork projects 2009-2017
- fieldwork administration system
- registry of fieldwork events and sites 1990-2015
- primary expert data (“sites & monuments record”)

MADP (MADB) 2017-
- specialised expert data

State Archaeological System (SAS) CR
- derived (secondary) expert data
- CZAD, CRL, Vitrea, etc.
- linked information systems
- Prague Archaeological
  - specialised web sites
  - academic publications
  - research applications

Archaeological Atlas CR 2014-
- data for the wide public

Digital Archive AMCR 2002-2016; 2016-
- repository of fieldwork documentation

Beginner information system of the Czech Republic
- bibliography, maps
- specialises databases
- auxiliary data
- systematized external data
- unsystematized external data
- scattered data
Data on fieldwork activities
(archaeological fieldwork reported for the years 2000-2014)
Non-invasive research results
(sites recognised by aerial prospection)
Maps and data on past settlement
(Neolithic Linear Pottery Culture settlements)
Register of prehistoric archaeological monuments ... (prehistoric hillforts)
... and historic as well

(medieval castles)
theoretical research based on AIS CR data

(1) structure and long-term trends in the settlement development

(2) modern methods of non-invasive survey and data processing

(3) analysis and reconstruction of the ancient landscapes using digital technologies

(4) theory of archaeological transformations

and more...
work plan for the years 2018-2021 (AIS-2 project)

(1) optimizing the interface and the system tools of the AMCR, updating HW & SW facilities

(2) finishing review and harmonisation of the existing datasets and their publishing in the AIS CR systems

(3) development of the data content: searching for missing data on the archaeological heritage of the CR

(4) support to the (both basic and applied) research: creating a team of specialists on landscape and settlement archaeology

(5) organizing workshops to present the potential of the AIS infrastructure, influencing and teaching the research community to use it

(6) steps towards the national and international integration (standardisation); cooperation on the Digital Humanities topics; building-up a virtual research environment (VRE)

Thank you!