

European Research Infrastructure for Heritage Science (E-RIHS)

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The European Research Infrastructure for Heritage Science (E-RIHS) is one of the six new projects which entered the ESFRI Roadmap in 2016, and the only research infrastructure project in the Social and Cultural Innovation section of the Roadmap. E-RIHS will help the preservation of the World's Heritage by enabling cutting-edge research in HS, liaising with governments and heritage institutions to promote its constant development and, finally, raising the appreciation of the large public for cultural and natural heritage and the recognition of its historic, social and economic significance.

At present representatives of sixteen countries (15 from EU and Israel) have submitted the proposal of the project E-RIHS PP to develop in the next three years the preparatory phase of the E-RIHS. It is expected that the E-RIHS will be launched as a standalone research infrastructure in 2021.

The European Research Infrastructure for Heritage Science (E-RIHS) will support research on heritage interpretation, preservation, documentation and management. It will comprise: E-RIHS Headquarters and National Hubs, fixed and mobile national infrastructures of recognized excellence, physically accessible collections/archives and virtually accessible heritage data. Both cultural and natural heritage are addressed: collections, buildings, archaeological sites, digital and intangible heritage. E-RIHS will provide state-of-the-art tools and services to cross disciplinary research communities advancing understanding and preservation of global heritage. It will provide access to a wide range of cutting-edge scientific infrastructure, methodologies, data and tools, training in the use of these tools, public engagement, access to repositories for standardized data storage, analysis and interpretation. E-RIHS will enable the community to advance heritage science and global access to the distributed infrastructures in a coordinated and streamlined way.

The major services to the community, provided now as transnational and virtual access by the two projects IPERION CH and ARIADNE, will be organized on four platforms:

1. MOLAB: access to advanced mobile analytical instrumentation for non-invasive or minimally invasive measurements on valuable, fragile or immovable objects, archaeological sites and historical monuments. The MOBILE LABORATORIES will allow its users to carry out complex multi-technique diagnostic projects, allowing effective in situ investigation.
2. FIXLAB: access to large-scale and specific facilities with unique expertise in Heritage Science, for sophisticated scientific investigation on samples or whole objects, revealing micro-structures and chemical composition, giving essential and invaluable insights into historical technologies, materials and species, their context, chronologies, alteration and degradation phenomena.
3. ARCHLAB: physical access to archives and collections of prestigious European museums, galleries, research institutions and universities containing non-digital samples and specimens and organized scientific information.
4. DIGILAB: virtual access to organized knowledge and scientific information in heritage data hubs – including multidimensional images, analytical data and documentation – from large academic as well as research and heritage institutions.

Other forms of scientific activity will be aimed at continuous development of methods and instruments to upgrade the access offer.

The E-RIHS infrastructure web site (under construction): <http://www.e-rihs.eu/>.
