MERIL
MAPPING OF THE EUROPEAN RESEARCH INFRASTRUCTURE LANDSCAPE

MERIL Case Study

Mapping out science in the Upper Rhine region

The challenge

Located near the adjoining borders of France, Germany and Switzerland, the Upper Rhine region is an academically productive area, the home of major universities including the University of Strasbourg and the University of Freiberg. Nonetheless, strengthening the scientific and academic presence of this tri-national metropolitan region will have major advantages, and national institutions proposed a unique solution.

The RMTMO RI project – Stärkung der Forschungsinfrastruktur in der Metropolregion Oberrhein (Strengthening research infrastructure in the Upper Rhine Metropolitan region) – is a three-year project, which is being carried out by 14 universities and research institutions led by the University of Freiburg. It began in 2017 with the aim to establish a cross-border research infrastructure (RI) to strengthen the academic bonds between these countries, creating a truly European institution where scientists from across Europe have a platform to collaborate.

Before identifying the appropriate features of this RI, the first part of this project needed to develop a database of all the research infrastructures (RI) in the Upper-Rhine region. Not only would this increase their visibility among scientific researchers and industry, opening up relevant discussions, it would inform the necessity and appropriate location for the RI.

Following on from this, the consortium could then begin to develop a concept study for the implementation of a new research infrastructure in the Upper-Rhine Valley. As a part of this, they will determine whether a new building might need to be constructed, or if different parts of existing facilities could devolve and become parts of a brand new research infrastructure. Therefore, a full understanding of the strengths and weaknesses of the RIs in the region and their scientific domains is required for these important decisions to be made.

Creating this foundation to develop a model for successful collaborative cross-border research activities and world-class science requires comprehensive and reliable data on each RI – which the MERIL database is ideally suited to provide.

The solution

To achieve the first stage of the project, the Science Working Group from the University of Strasbourg (one of the RMTMO project partners) were tasked with mapping out the research infrastructures with a presence in the Upper Rhine region. They began using the national roadmaps across the three countries in the region (France, Germany and Switzerland) and checking which RIs have entry points in the area.

This provides useful but limited geographic information, and so the group also reached out to staff at MERIL (Mapping European Research Infrastructure Landscape) to provide data on the research infrastructures that were present in MERIL database in the defined the region.

MERIL provides comprehensive and up-to-date database of European research infrastructures, covering over 1000 RIs across all scientific domains. The team provided the working group with a detailed list of RIs present in the region, collected as part of the ongoing project.

The impact

The data that the MERIL team provided was hugely useful for the working group. The MERIL database and expertise of the team could efficiently direct the group towards the required information far quicker than collecting the information from individual RIs. Many universities do not have a concrete understanding of the intricacies of their own research infrastructure, but the data submitted to MERIL was able to fill in the gaps.

The data from MERIL is collected using a bottom-up approach, complementing the data from the national roadmaps, as provided by the ministries, which utilises a top-down approach. This was particularly beneficial because top down approaches are the official point of view from the ministries, but this can sometimes miss out some RIs that are not on their strategic roadmaps. MERIL enabled the team to cross reference information and include Pan-European RIs that might have otherwise been omitted.

It also provides detailed information on the scientific domains of the RIs and where they are located across the three countries, offering a good overview of the strengths and weaknesses in the territory. Additionally, the breadth of the database, covering much of Europe, enabled the project to benchmark the current research capabilities of the Upper Rhine against comparable regions.

This clear overview of the RI landscape in the area provided by the MERIL database will ultimately allow the consortium to make informed assessments and decisions for the next stage of the project: developing an official recommendation for the locations and structure of a future RI to bring together researchers from across Europe in a unique and promising collaboration.