

Figure 3: MIDAS Workpackage Structure & Phases

Figure 4: MIDAS Platform Architecture Layers

## **Consortium Members:**





Meaningful Integration of Data, Analytics and Services



@MIDASProjectEU



This project is funded by the European Union

Grant Agreement No. 727721

H2020-SC1-2016-CNECT SC1-PM-18-2016 - Big Data Supporting Public Health Policies

## **The Concept**

The Meaningful Integration of Data, Analytics and Services [MIDAS] project is funded under the EC H2020 PM 18 Big Data Supporting Public Health Policies. MIDAS is addressing the needs of policy makers and citizens across Europe by delivering a unified big data platform (c.f. Figure 1). This platform will map, acquire, manage, model, process and exploit existing heterogeneous health care data and other governmental data-along with external open data to enable the creation of evidence-based actionable information. As a result, this platform will inform better long term policy-making decisions and yield a positive impact on point of care health in all policies across Europe at regional, national and European levels.

Health care systems already store enormous quantities of valuable heterogeneous data with many gatekeepers protecting this data and no consistent methodologies for managing consent or for governing any secondary use of the data. Governments are collating and providing non-personal open data while European citizens are also collating valuable sources of electronic data via mobile devices and social networks. Such data sources are currently stored in heterogeneous locations and use different standards with no clear policy directives. Policy makers and gatekeepers of this data lack the capability to map and overlay these sources, and therefore lack the capability to create, extract and take action on this information. MIDAS seeks to overcome this challenge.

The project involves managers of the health care systems, patients and citizens across the participating regions. This will ensure that solutions are tested, feedback is received, results are actionable and the best methods are developed across a range of epidemiology challenges. Importantly, it will also ensure the long-term sustainability of the results through the MIDAS Policy Board, which includes policy makers, public and private data gatekeepers and representatives of public health agencies.

## Methodology

The overall user-centred, iterative, co-creative approach employed in MIDAS is combined with an agile software development methodology, governed by significant formal interaction and input from a board of policy makers drawn primarily from the consortium, and positioned within a technical platform architecture.

## **Policy Board**

A key component in informing and moderating the technical vision is the input and interaction from the MIDAS Policy Board. The MIDAS Policy Board is a key innovation in this project, whose membership is drawn from the stakeholders with the key policy and operational knowledge required to address real healthcare policy need across different regional and national policy agendas, such as health in all policies. The MIDAS Policy Board includes individuals and organisations with key stakeholder knowledge, gatekeepers of the health data, members responsible for policy making across six regions within the European Union and one from the US and helps co-create the improved Policy Process MIDAS will deliver.

Key stakeholders have been identified from each MIDAS platform pilot region and with them the most relevant scenarios and user stories for the their chosen pilot policy area:

Basque Country (BIOEF): Child obesity prevention prioritised policy

*Finland (THL):* Preventive mental health and substance abuse in young people

Northern Ireland (HSC NI / BSO): Children in Care

Republic of Ireland (HSE): Diabetes

The MIDAS Platform will provide an improved policy process as in Figure 2 below.





