HealthData@EU Pilot
# Work package 5 (IT Infrastructure)

13/03/2023 - Launch of the Proof Of Concept

Launched in October 2022, the HealthData@EU Pilot project reached a first milestone by framing the scope and activities that will be performed during the Proof Of Concept (PoC) phase. The framing phase allowed us to draft a first high-level vision of the target architecture and to define an organizational framework to implement an EHDS solution. Starting in March 2023, the PoC phase aims to deliver and deploy a Minimum Viable Product (MVP) at the end of 2023 enabling the two first steps of the user journey :

Data discovery

Expose a public European dataset catalogue in order to allow researchers to discover national datasets that are relevant.

Data permit

Provide a single entry point for researchers to request access to one or many national datasets.

The target: a Minimum Viable Product deployed on 3 nodes and connected to central services

The target MVP expected for December 2023, will focus on connecting three nodes (France, Denmark and Finland) and the European Central Services by setting up an [eDelivery](#) network. This MVP network will be used to centralize national dataset catalogues to the European one and to forward data permit requests from central services to the three nodes.

European central services

Finnish Findata

eDelivery network

Danish Health Data Authority

French Health Data Hub
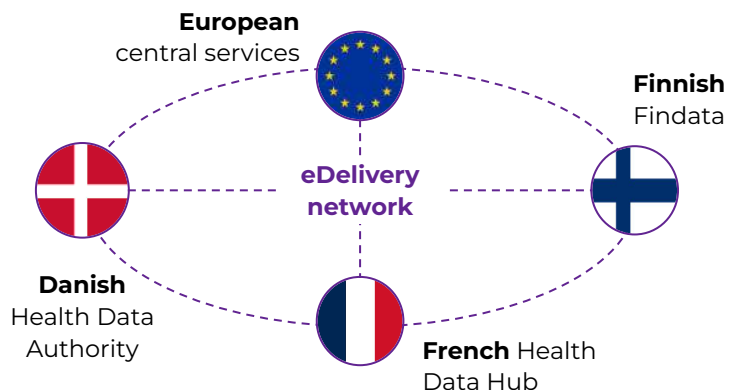
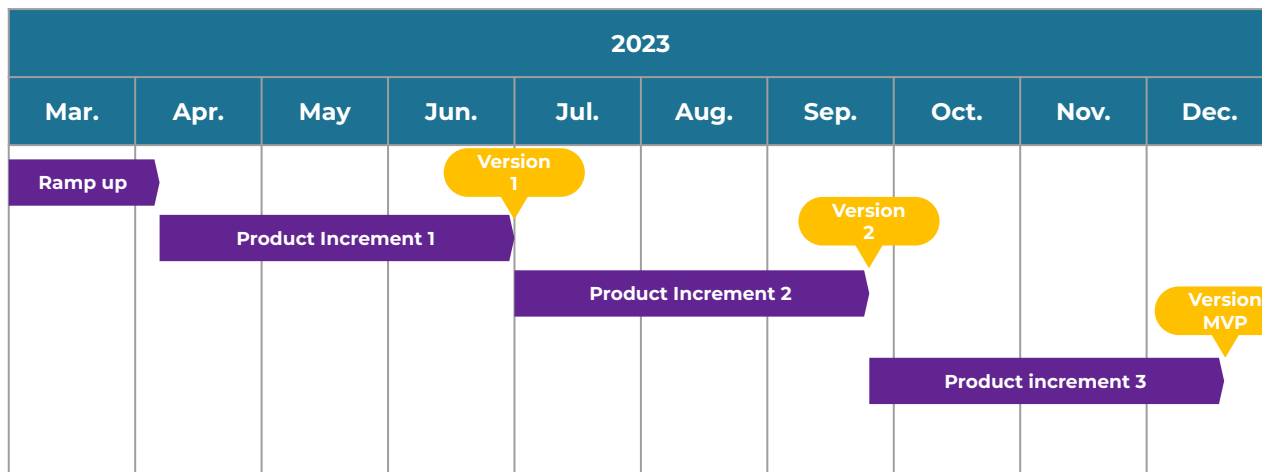## A first high level vision of the target architecture

The design of the target solution has been driven by three main guidelines : (1) build a scalable and distributed network that can easily onboard new nodes or host a new technical use cases, (2) leverage open source technologies and (3) propose a security- oriented solution. The infrastructure for each node comprises a **cross-border gateway** in charge of eDelivery communication with other nodes, a **national connector** that provides all necessary features to fulfill the needs of the user journey steps to the nodes and **crossborder engines** that translate existing national capabilities of the nodes to a crossborder standard.
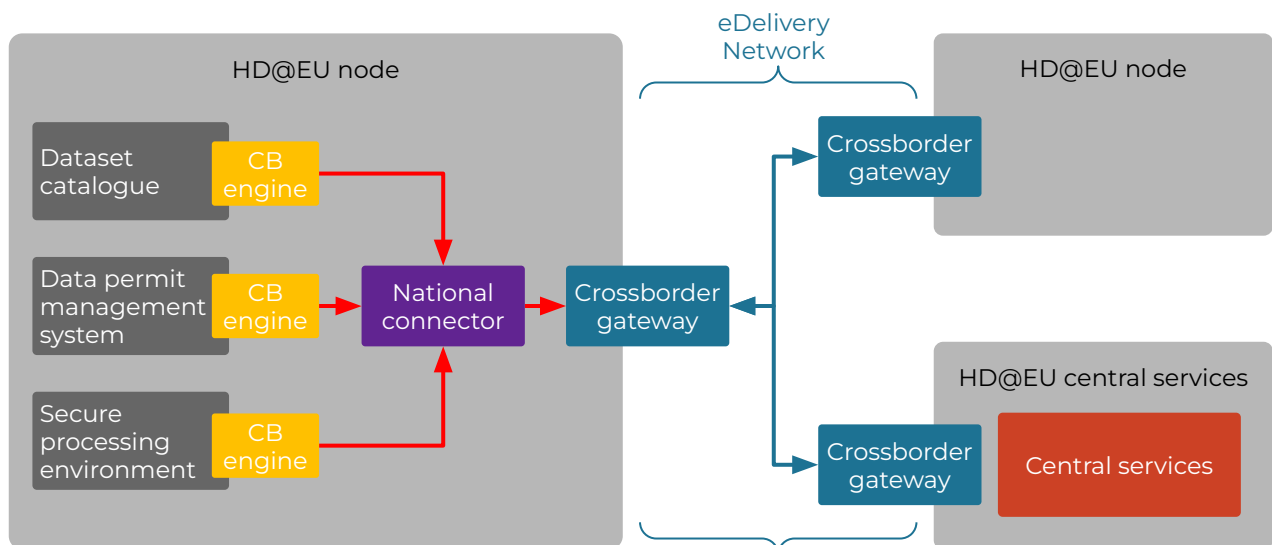
Schema 1 : High Level Design

An iterative approach to deliver the Minimum Viable Product (MVP)

The full specifications of the solution are strongly dependent to tasks performed by work packages 6 and 7 and won't be provided at the beginning of the POC phase (i.e. definition of the metadata standards or definition of the information that needs to be provided by an applicant during a Data Permit process). In order to parallelise tasks, the implementation of the solution will be done incrementally, by delivering multiple functional versions of the solution. We plan to deliver three product increments before December 2023, each one being an improvement to the prior version.

2023									
Mar.	**Apr.**	**May**	**Jun.**	**Jul.**	**Aug.**	**Sep.**	**Oct.**	**Nov.**	**Dec.**
Ramp up			Version 1						
	Product Increment 1					Version 2			
				Product Increment 2					Version MVP
						Product increment 3			

Schema 2 : Implementation planning

An organisational framework enabling collaboration between the different stakeholders

The POC phase will address many topics to build the solution: infrastructure setup, implementation of workflows for data discovery and data permit, deployment on both nodes' side and Central Services' side. Thus, the POC requires a strong collaboration between the different stakeholders :

- Work Package 5 core team (WP5): in charge of the development of the national connector and the crossborder gateways
- Central Services team (CS): in charge of the development and deployment of central services
- POC Nodes (Node) in charge of the development of the crossborder engines and the deployment of the national connectors and crossborder gateways
- Work Package 6 core team (WP6: Metadata standards): in charge of providing specifications for data discovery workflows
- Work Package 7 core team (WP7: Regulatory and legal compliance): in charge of providing specification for data permit workflows

WP5
CS
Node
} In charge of implementation & deployment

WP6
WP7
} In charge of providing specifications for data discovery & permit workflows
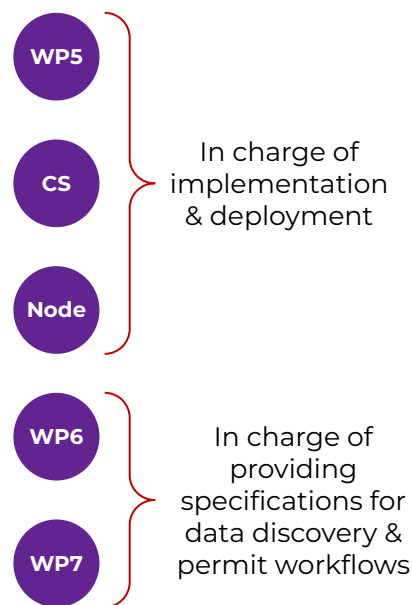
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