## decode



# Data sovereignty for the People!

DECODE is a multidisciplinary EU project that responds to people's concerns about a loss of control over their personal information on the internet. The ability to access, control and use personal data has become a means by which internet companies can drive profits. The people who create much of this data have lost control over how it is used. This is a problem.

We believe that people should have a choice about what happens to their data and digital identity, and they should decide what data they want to keep private, what data they want to share, with whom, for which purposes, and on what terms.

#### The DECODE Decentralised Infrastructure

DECODE is a decentralized, privacy-enhancing, rights preserving platform to give back data sovereignty to people and enable citizens' digital rights, it provides:

- DECODE OS
- DECODE Distributed nodes
- DECODE Data Commons Management
- DECODE Blockchain and smart contract platform

#### **DECODE's Pilots**

We are running four pilots in Amsterdam and Barcelona to test DECODE's technology and approach. These have all been informed by engagement with communities in those cities, focusing on real-world problems identified in workshops and other conversations.

### Barcelona - Digital Democracy and Data Commons (DDDC)

The pilot will involve the Barcelona City Council and the city's digital democracy software Decidim.org, which has more than 60K users. The platform will integrate a DECODE module which allows petitions to be signed anonymously but in line with authentication requirements, such as place of residence. This new system for citizen petitions gives people more control over their data. It will enhance privacy, allow data sharing and visualization (via the BCNNOW dashboard) and transparency (via

the DECODE distributed ledger). The pilot will also open a deliberative, participatory process on the politics and economics of data, and how Barcelona could constitute a democratic city data commons.. decidim.org • bcnnow.decodeproject.eu



#### Barcelona - Citizen Science Data Governance

In this pilot residents will use environmental sensors which record factors such as noise levels and pollution. The sensors will be located inside their homes and in their neighbourhood. DECODE technology will enable them to share this encrypted data anonymously with their communities, on their own terms.

The pilot will run sessions to train and support participants to help them setup and use the sensors to gather and analyse data to influence city-



level decisions. The pilot tackles the technical challenges of collating and storing a stream of citizen-sensed data, while also enabling those citizens to control what information is shared with whom, and under which conditions.

This pilot will be run in collaboration with Barcelona community organisations Ideas for Change and FabLab Barcelona.

smartcitizen.me

## Amsterdam - Amsterdam register - age check with municipal census data

This pilot will give citizens access to personal data that is stored in the municipal database, and allows them to share these data in a different context, on- or offline. In the pilot, participants will use DECODE technology to prove their age, certifying that they are over 16 or 18 years of age, without having to share their full

identity or social security number. This pilot uses Attribute Based Credentials, a data minimising authentication mechanism.



#### **Amsterdam - Gebied Online**

GebiedOnline is a local neighbourhood social network in Amsterdam. Access to is currently managed by email/ password or Facebook login, creating unwanted dependencies and security problems. This pilot provides an opportunity for DECODE to test a more privacy-preserving local social network. The GebiedOnline board and community want their platform to be open source, inclusive and to give users granular control over the data they share with other users in the

community. To achieve this the pilot will introduce a feature which allows access to the platform using Attribute Based Credentials, giving each active community on the platform the choice of which credentials it can accept.







#### Why Use DECODE

DECODE offers a range of functionalities and its tools are openly available to everyone, from citizens through to city governments and digital entrepreneurs. DECODE enables:

- Privacy by design
- Anonymous but authenticated participation on internet platforms
- Cranular control of data sharing to communities
- Data Entitlements and data commons licensing
- Encrypted data storage and sharing, including of IoT data

#### Participate in DECODE



Each pilot represents a chance to test DECODE's technical capabilities and real-world impact in Amsterdam and Barcelona. DECODE is an open source project and there will also be opportunities to engage in our work through organised hackathons and other public events.

DECODE tools are fully documented and available on Github and the project will engage with coders, developers and innovators to test the technology in other areas.

To find out more and get involved with DECODE, visit: www.decodeproject.eu follow our twitter: @decodeproject or visit our github: github.com/DECODEproject