

SEDIMARK aims at designing and prototyping a secure decentralised and intelligent data and services marketplace that bridges remote data platforms and allows the efficient and privacy-preserving sharing of vast amounts of heterogeneous, high quality, certified data and services supporting the common EU data spaces.



Secure Decentralised Intelligent data MARKETplace



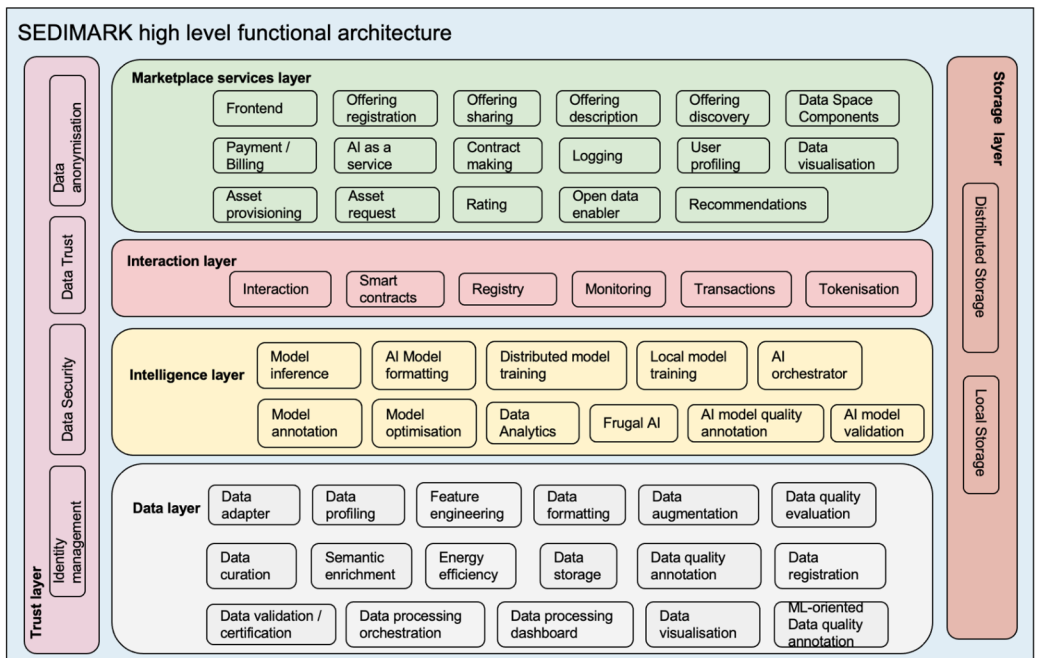
SECure Decentralised Intelligent data MARKETplace

Features and functionalities

Marketplace	Decentralised
<ul style="list-style-type: none"> Data/services publication Data/services discovery Value exchange 	<ul style="list-style-type: none"> Distributed storage Federated repositories Edge access
Intelligent	Secure
<ul style="list-style-type: none"> Data interoperability Semantic annotation (metadata) AI-based data enrichment (quality, linkage, augmentation) Energy efficiency Added-value as a Service 	<ul style="list-style-type: none"> Identities (provenance, reputation) Data exchange Trustworthiness (access control, usage control, logging) Data storage & data sovereignty

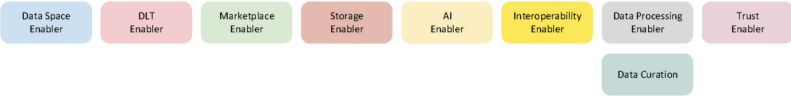
SEDIMARK merges the expertise of a large team of experts to build a secure, trusted and intelligent decentralised data and services marketplace, based on Distributed Ledger Technology and Artificial Intelligence. SEDIMARK enables distributed heterogeneous data within the EU to be easily and seamlessly linked, shared and exploited for diverse business and research scenarios.

SEDIMARK high level functional architecture



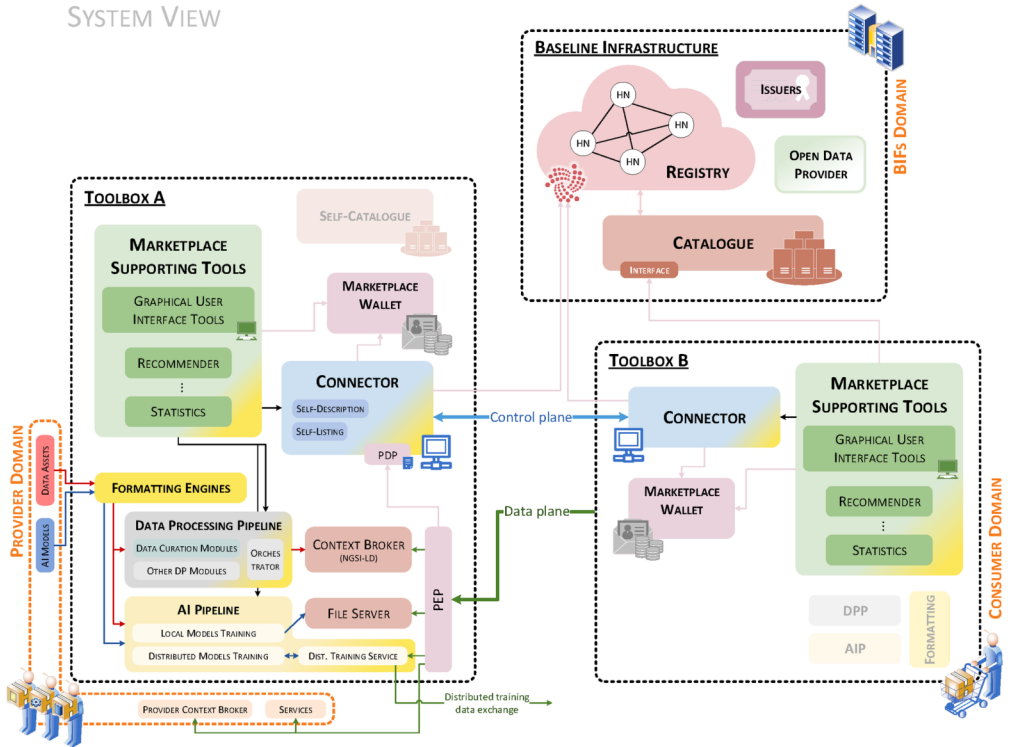


SECure Decentralised Intelligent data MARKETplace



FUNCTIONAL VIEW

SYSTEM VIEW



Decentralised architecture

Data Spaces

Eclipse Data Connector

Semantic-enabled Catalogue

Self-Sovereign Identities
Verifiable Credentials

Powered by IOTA DLT

AI & ML based Data Enrichment

NGSI-LD Compatible

Distributed & Gossip AI Learning

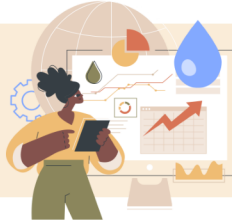
Recommender System



Marketplace Use Cases...



Valorisation of energy-consumption data



Valorisation of water-related data



Urban bike mobility planning



Mobility Digital Twin

1st October 2022

↪ 30th September 2025



Total cost
€ 5.25 millions

EU contribution
€ 4.4 millions



designed using assets from Freepik.com (by:brandify, freepik, macrovector & vectorjuice)



SEDIMARK project is funded by the European Union under the Horizon Europe framework programme (grant number 101070074). It is also partly funded by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee (grant number 10043699).

