

10/3/2023

ΘΕΡΜΟΚΟΙΤΙΔΑ ΝΕΟΦΥΩΝ
ΕΠΙΧΕΙΡΗΣΕΩΝ ΑΘΗΝΩΝ

ΗΜΕΡΙΔΑ

"Synergies for the future:
The European Blockchain Services
Infrastructure and the European
Digital Innovation Hubs"

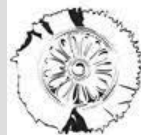
ELEDGER 

Δυνατότητες αξιοποίησης και εισαγωγής τεχνολογιών blockchain στο τομέα της ΥΓΕΙΑΣ στην Ελλάδα

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ΕΚΕΤΑ - ΙΠΤΗΛ Θεσσαλονίκη


Ψηφιακές Πόλεις Κεντρικής Ελλάδος Α.Ε.



ΕΚΕΤΑ
ΕΘΝΙΚΟ ΚΕΝΤΡΟ
ΕΡΕΥΝΑΣ & ΤΕΧΝΟΛΟΓΙΚΗΣ
ΑΝΑΠΤΥΞΗΣ



ΠΑΝΕΠΙΣΤΗΜΙΟ
ΘΕΣΣΑΛΙΑΣ



JRC Technical report

European Landscape on the Use of Blockchain Technology by the Public Sector

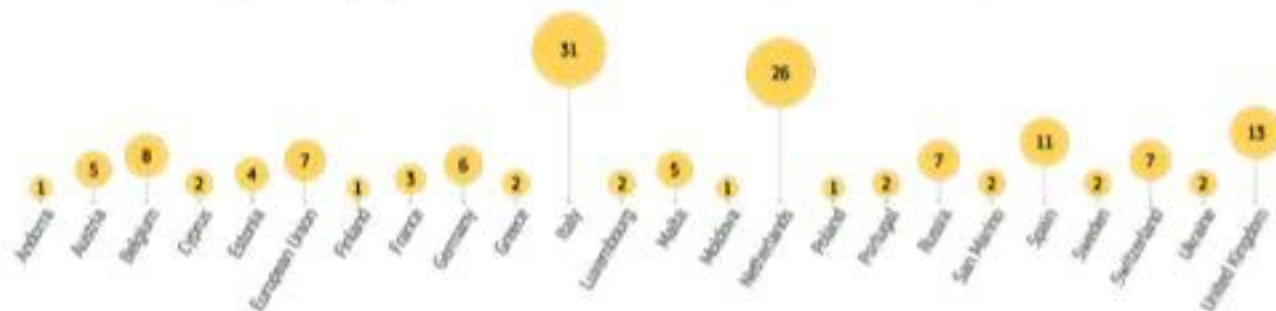
2022

interoperable
europe

EUR 31332 EN

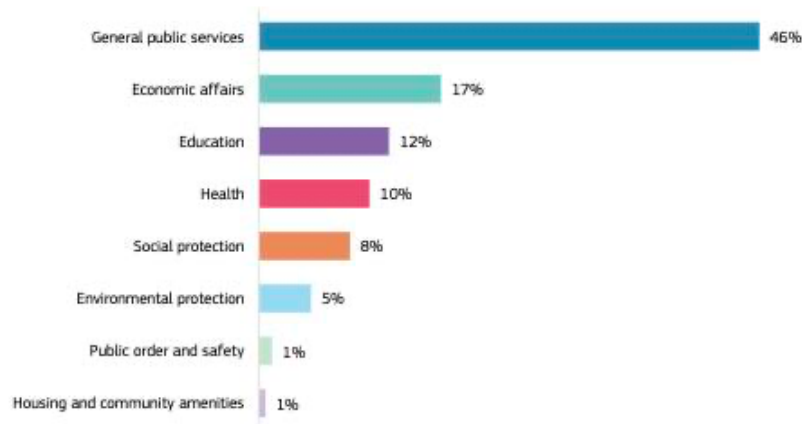
Joint Research Centre

Figure 2. Mapping the blockchain-based use cases in the public sector in Europe



Source: JRC's own elaboration

Figure 3. Public administration main sectors with blockchain-based use cases (COFOG Level I)



Source: JRC's own elaboration



Αντιστοίχιση blockchain use cases in the health sector στην ΕΕ με Ελλάδα: COVID 19 Certificates

Verification of COVID-19 testing	https://www.coindesk.com/business/2020/06/17/digital-identity-system-austrian-government-funds-development-of-blockchain-based-covid-19-app/	The project is called QualiSig and uses elements of Austria's digital identity system to create three COVID-related prototypes around fraud prevention, fake news and health data. The project uses transparent, encrypted communications and secure and decentralized data storage. Citizens will have sole responsibility for control over their data, using qualified digital signatures through mobile devices. The QualiSig prototypes use the Ardor blockchain built by Swiss firm Jelurida and its Ignis tokenizing system.	National	Austria	Federal Ministry for Digital and Economic Affairs	Central-Government
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Αντιστοίχιση blockchain use cases in the health sector στην ΕΕ με Ελλάδα: exchange of EMR

Enabling the transparent exchange of medical records	https://www.thebusinessinsider.com/2018/01/10/blockchain-trial-in-healthcare/	Medicalchain, a blockchain platform that enables the transparent exchange of medical records by patients and doctors, partnered with the London-based Groves Medical Group to Proof of Concept a blockchain programme in its four medical centres. The Proof of Concept allowed Medicalchain to gather feedback from doctors and patients that they will use to refine the programme before its global launch. Groves' registered patients were be able to create a free wallet that will hold and manage access to their health records. Video consultations were also be available to patients, offering the flexibility to see their doctor at a time and place suited to their needs. The platform gives patients the option to pay for services using cryptocurrency, with users being incentivised to pay for telemedicine services with Medicalchain's MedTokens.	Local United Kingdom	Groves Medical Group	Private sector



Αντιστοίχιση blockchain use cases in the health sector στην ΕΕ με Ελλάδα: Medical data management in Hospital

Medical Data Management	https://cointelegraph.com/news/cyprus-hospital-to-deploy-dlt-based-medical-data-management	VeChain co-developed a blockchain-based medical data management platform in partnership with digital healthcare solution firm I-Dante. The platform, dubbed “The E-NewHealthLife”, is being deployed at the Mediterranean Hospital of Cyprus. The first phase of the platform’s rollout will see it used in the emergency department of the Cyprus hospital, allowing patients to identify themselves, check waiting lists, and autonomously manage their medical records from their mobile phone.	National	Cyprus	VeChain	Private sector
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Αντιστοίχιση blockchain use cases in the health sector στην ΕΕ με Ελλάδα: EMR on national level

Health Records	<p>The Electronic Health Record (e-Health Record) is a nationwide system integrating data from Estonia's different healthcare providers to create a common record every patient can access online. Functioning very much like a centralized, national database, the e-Health Record actually retrieves data as necessary from various providers, who may be using different systems, and presents it in a standard format via the e-Patient portal. A powerful tool for doctors that allows them to access a patient's records easily from a single electronic file, doctors can read test results as they are entered, including image files such as X-rays even from remote hospitals. For assuring the integrity of retrieved electronic medical records as well as system access logs, the KSI blockchain technology is being used.</p> <p>https://e-estonia.com/solutions/healthcare/</p>	National	Estonia	Central-Government
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Αντιστοίχιση blockchain use cases in the health sector στην ΕΕ με Ελλάδα: HepC Registry

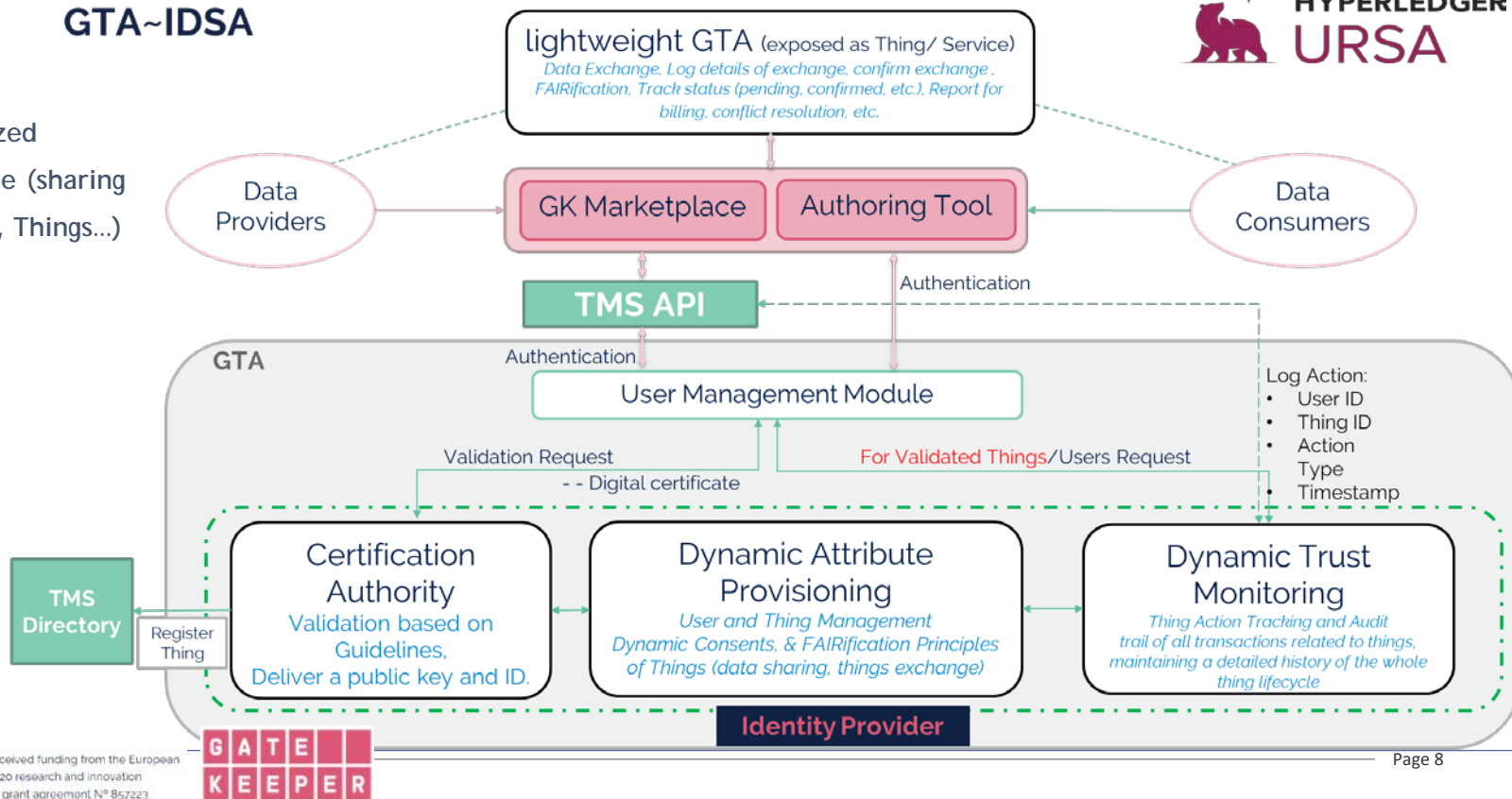
Study of therapies for viral hepatitis	https://www.corierecomunicazioni.it/pa-digitale/e-health/la-blockchain-contro-lepatite-al-via-il-progetto-delliss/	The Italian platform for the study of therapies for viral hepatitis of the Istituto Superiore di Sanità will be based on distributed ledger technology. The centers that are part of the project will share and use the contents according to a methodology that guarantees maximum transparency, a shared ownership in which every change made is seen in real time by everyone and at the same time ensures privacy and incorruptibility of data to the citizens.	National	Italy	Istituto Superiore di Sanità	Central-Government
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Digital identity & Blockchain in Healthcare

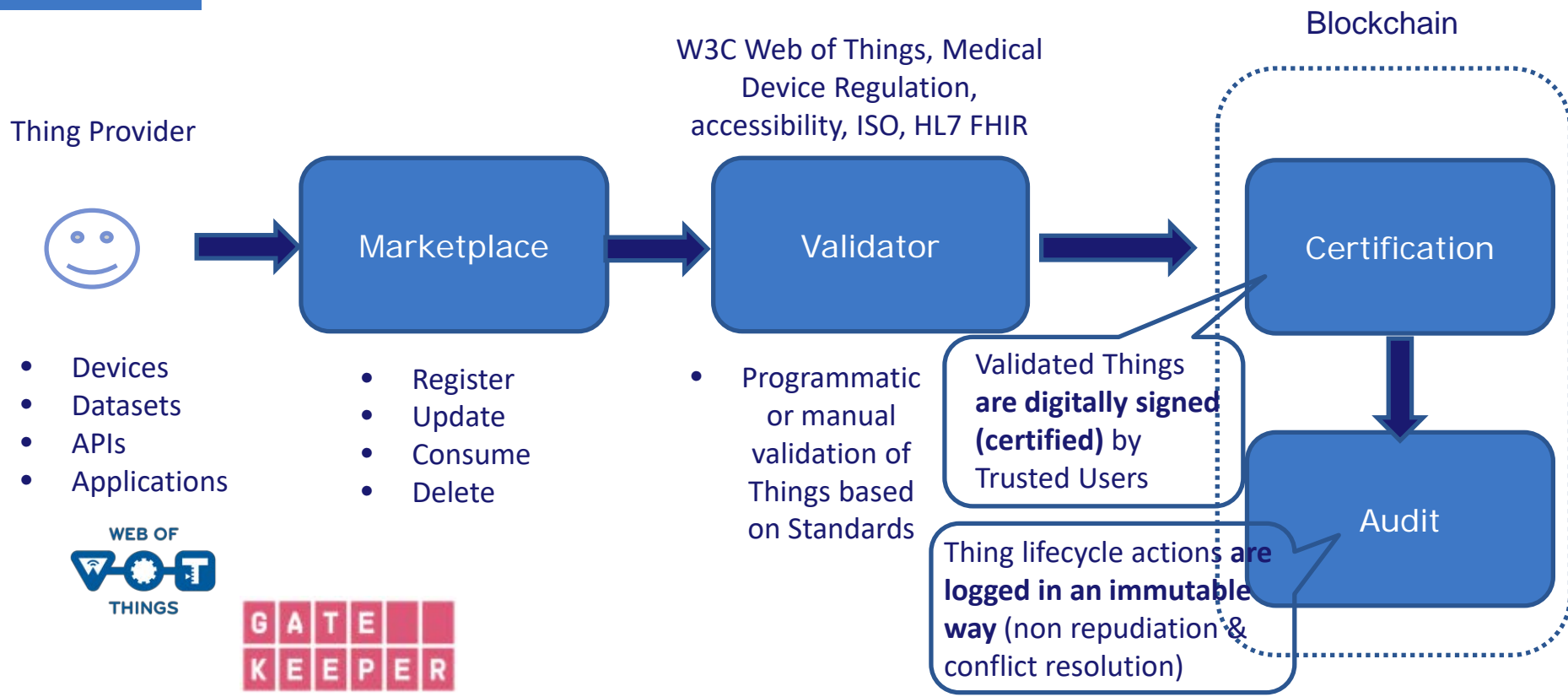


GTA~IDSA

Decentralized
Marketplace (sharing
data, Apps, Things...)



Blockchain usage in Gatekeeper



Example Thing in Marketplace

Home > APIs > Test API 2



2. The Thing is
Certified Using
Blockchain



**TEST
API**

€5.00 for 1 month with a 3-day free trial

1

Sign up now

Request Demo/Consultation

Report this

Details API Info Ratings Policies Q&A Provider Thing Description **WC**

Description

This Thing is for testing purposes

1. The Thing is
Validated against
these Standards

Certifications / Compliance

WC WAI-AA WCAG 2.1

Accessibility



GDPR Compliance Statement

Download

MD

Medical device, MDR/MDD/ MDD towards



Evaluated AI (based on SPIRIT-AI)

Download

G A T E
K E E P E R

Got a question? Ask The GK Virtual Agent

INTERNATIONAL DATA SPACES - GATEKEEPER

Αποκεντρωμένος
διαμοιρασμός δεδομένων:
μέσω Marketplace, όχι με
το Marketplace

Πλήρης έλεγχος του χρήστη για την
πολιτική χρήσης των δεδομένων του
(για πόσο διάστημα, με ποιο σκοπό, ...)

DATA SOVEREIGNTY

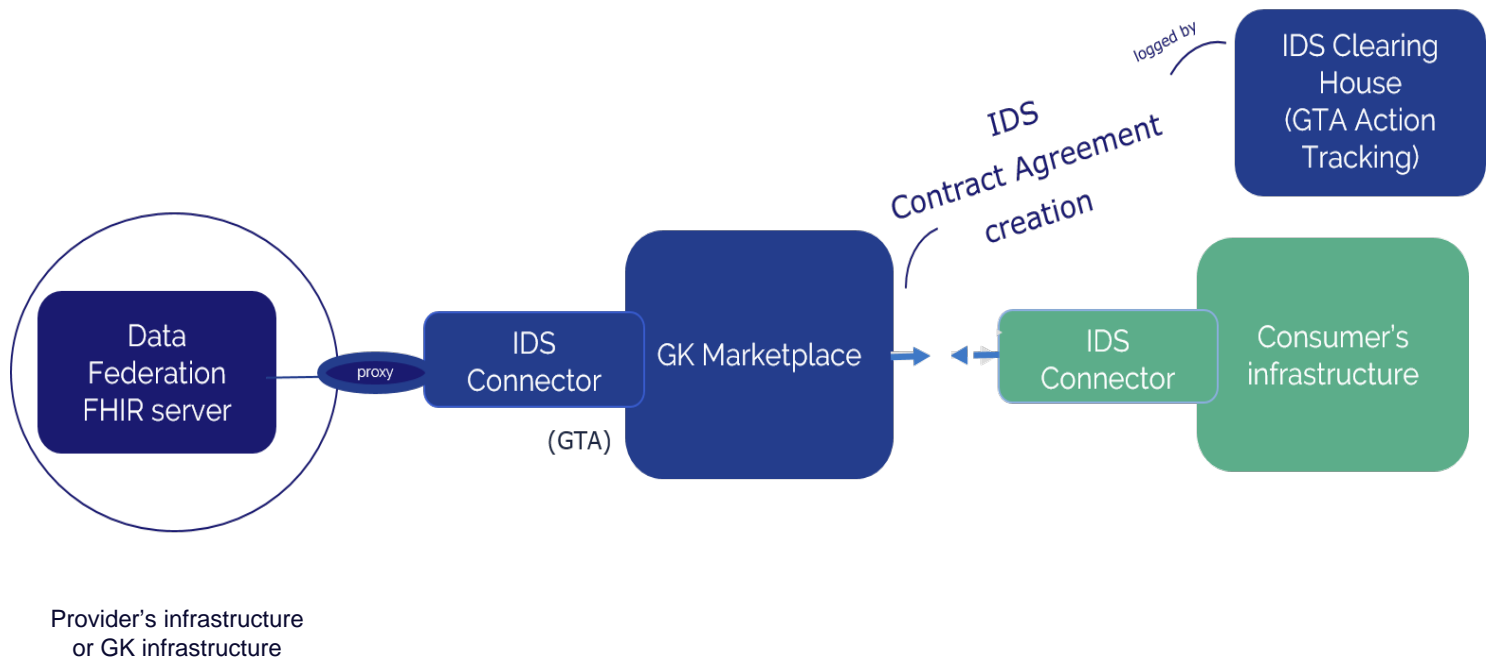
The screenshot displays the GATEKEEPER Marketplace interface. A modal window titled 'Purchase MetS Questionnaire Responses - Sample' is open, showing 'Your Connector Credentials' (URL, Username, Password), 'Select Representation' (Creation Date, Title, Language), 'Artifacts' (Creation Date, File Name, Byte Size), and 'Contract Information' (Rule, Start Date, End Date). The background shows the Marketplace homepage with a sidebar menu (Overview, My Store Settings, Things Manager, Payments & Transactions, Subscriptions, Statistics, Documentation) and a main content area titled 'IDS Contract Agreements'.

Total Agreements

Test Dataset Ts	Permission Type Ts	Permission Description Ts	Contract Start Ts	Contract End Ts	Contract Expiration Ts	Assignee Ts
external dataset	GK Marketplace Usage	Usage policy provide access applied	08-12-2022 12:32	13-01-2023 02:00	Contract Expired	https://ids-connector-b-gk.itigr
Demo Data 1	GK Marketplace Usage	Usage policy provide access applied	07-12-2022 10:40	13-01-2023 02:00	Contract Expired	https://ids-connector-b-gk.itigr
Test data 3	GK Marketplace Usage	Usage policy provide access applied	07-12-2022 12:27	13-01-2023 02:00	Contract Expired	https://ids-connector-b-gk.itigr
test data 4	GK Marketplace Usage	Usage policy provide access applied				
MetS Questionnaire Responses						
Practitioner entries						

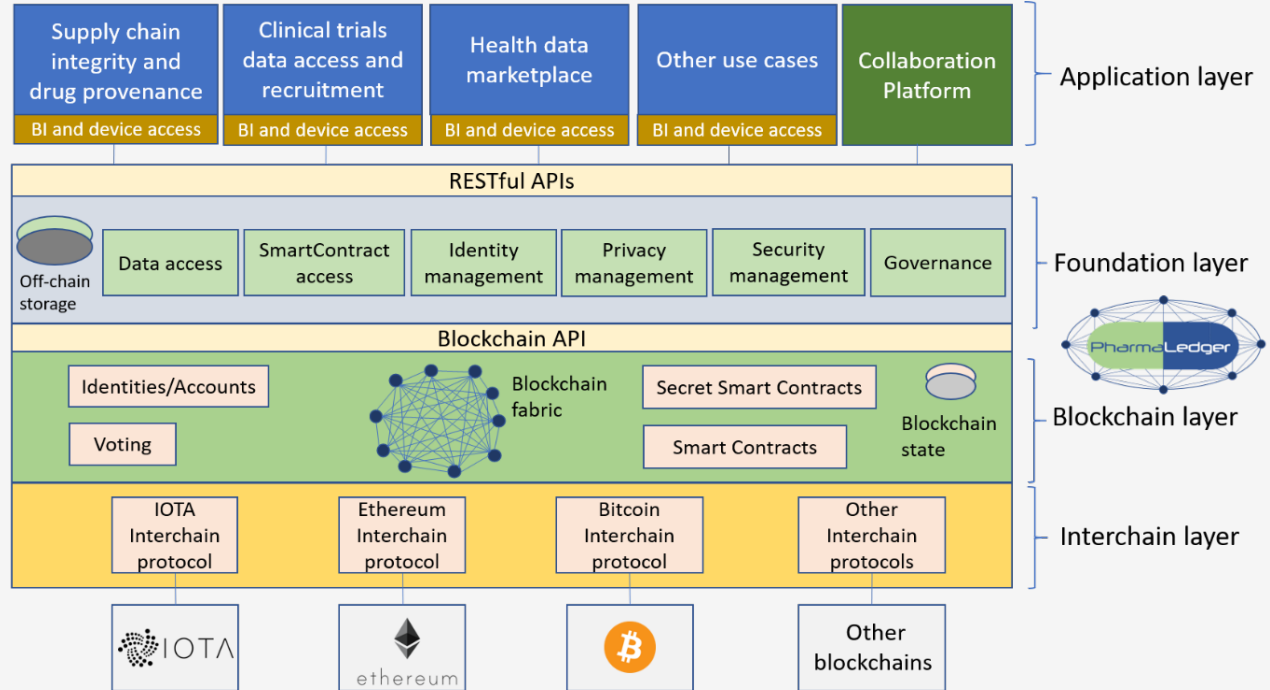
Showing 1 to 3 of 3 agreements

INTERNATIONAL DATA SPACES - GATEKEEPER



Blockchain in Pharma Industry

...Our work with the pharma industry...Pharmaledger H2020 example



European Federation of Pharmaceutical Industries and Associations involved (indicative)

abbvie

AstraZeneca



janssen



PharmaLedger reference architecture



PharmaLedger

PHARMALEDGER OBJECTIVES

Propose an **integrated health data marketplace** and a **collaborative platform**.

Enable **agile and secure delivery** of **innovative applications**.

Ensure **privacy** and **confidentiality** of PharmaLedger data and transactions

Develop a **scalable, sustainable, beyond-state-of-the-art blockchain reference architecture** validating three prioritized **business use cases from different healthcare domains** involving key healthcare ecosystem stakeholders



Patient empowerment
Through self-sovereignty in a data marketplace



Supply chain transparency
through traceability and interoperability



Clinical trial efficiency
through data provenance and digitization

Allow **security of information** and **greater access** across use cases.

Provide a **legal and ethical framework** to ensure regulatory compliance.

Define and formalize an effective governance for a sustainable PharmaLedger framework.



PharmaLedger



SELECTED USE CASES

HEALTH DATA



**Personalized
Medicine**



**Clinical Trial
Recruitment**



**Medical
Device IOT**



eConsent

SUPPLY CHAIN



**Clinical Supply
Traceability**



**Finished Goods
Traceability**



**eLeaflet
ePI**



**Anti-
Counterfeiting**

ΕΥΧΑΡΙΣΤΟΥΜΕ ΓΙΑ ΤΗΝ ΠΡΟΣΟΧΗ ΣΑΣ!

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