Blingathon - TOKEN Platform Challenge

Design and build an Electronic Registered Delivery Service (ERDS)

Token Website

DLT4Gov Community

Design and build an Electronic Registered Delivery Service (ERDS)

A service to make it possible to transmit data between third parties by electronic means and provides evidence relating to the handling of the transmitted data, including proof of sending and receiving the data, and that protects transmitted data against the risk of loss, theft, damage or any unauthorized accesses and alterations.

This service will be used for electronic delivery of documents and as a Secure Electronic Messaging Service providing an easy, fast , secure and trustworthy way to deliver messages between entities, creating, in addition, evidence of the sending process for legal use.

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Specific Requirements

- **Secure** (tamper-proof)
- Compatible with **multiple media types**, not just plain text (data–images, documents, or types of media not yet invented)
- **Private** (third parties can't learn who's communicating about what, when;)
- **Decentralized** (derives trust for encryption, signing, authn … rather than oracles)
- **Routable** (like email, Alice can talk to Bob without a direct connection to Bob; allows mixed and dynamic transports; passes through mix networks and other generic infrastructure that sees only payload BLOBs)
- **Interoperable** (works across programming languages, blockchains, vendors, OS/platforms, networks, legal jurisdictions…)
- **Autodiscoverable** endpoints/addresses
- **Efficient & Human-Centric**

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Relevant Technologies, Concepts and Regulations

Verifiable Data
DLTs/DHT(Distributed Ledger Technologies/Distributed Hash Table)
Cryptography
Decentralized/Distributed Systems
PKI (Public key infrastructure)
Decentralized identity/identifiers
Privacy by Design
SSI (Self Sovereign Identity)/SSI Digital Wallets
ZKP (Zero-knowledge proof)
JSON-LD
DIDComm
DApps

GDPR
eIDAS (Regulation on electronic identification and trust services for electronic transactions)

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The Token Project

Launched in January 2020, TOKEN (Transformative Impact Of Blockchain Technologies in Public Services) is an EU funded project whose ultimate goal is to develop an experimental ecosystem to enable the adoption of Distributed Ledger Technologies.

Decentralised Ledger Technologies have the potential to allow public service to: improve effectiveness; reduce friction between agencies; reduce bureaucratic barriers; boost public engagement; enhance digital democracy and transparency; improve knowledge sharing; and foster automation.

TOKEN aims to provide a range of decentralised agnostic technological components enabling public agencies to pilot the adoption of Distributed Ledger Technologies.

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The Token Platform Services

The Token platform offers a developer-friendly set of plug-and-play services and open-source components for building decentralized apps and services.

Blockchain-based Notarization

- Stamp & Anchoring APIs
- *Canis Major BA (FIWARE)*

Decentralized Identity

- *Certh SSI*

Decentralized Storage

- TOKEN Storage Network
  - Redundant Public/Private storage
- IPFS Public Gateway
- IPFS Pinning Service

Secure messaging

- Token Streams

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The Token Platform Services

The platform website is available here: https://platform.token-project.eu

To create an account and start using the services please use this invitation link:
https://platform.token-project.eu/signup?token=hackathon

Docs & APIs reference: https://docs.token-project.eu

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