NGI TRUST CHAIN

TRUSTCHAIN OC1: DECENTRALISED DIGITAL IDENTITY

First webinar for Applicants

TRUSTCHAIN Consortium

27/02/2023

TrustChain Project. Funded by the European Union under GA No 101093274.
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TRUSTCHAIN

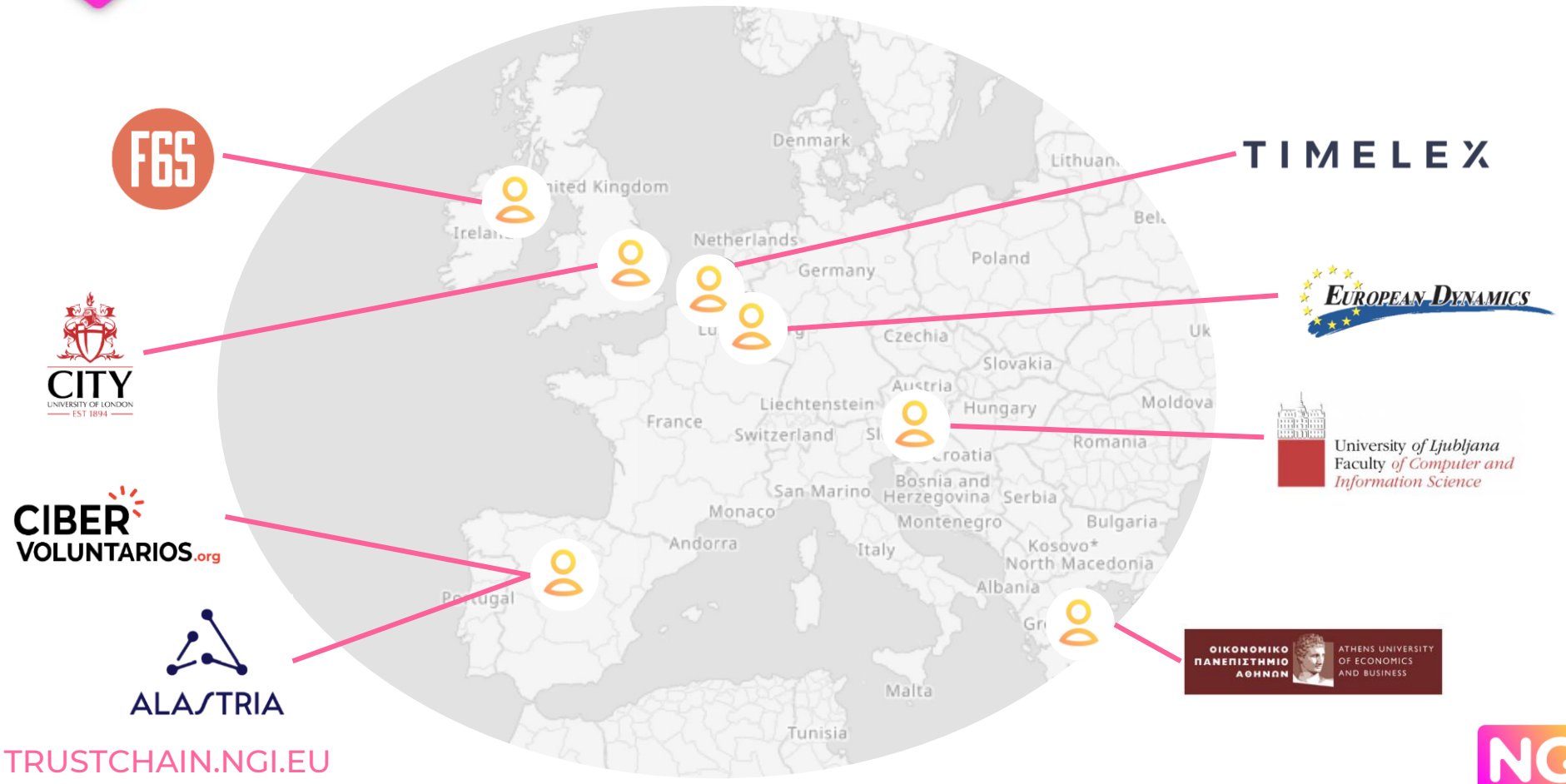
TRUSTCHAIN IN BRIEF

TRUSTCHAIN - Fostering a Human-Centred, Trustworthy and Sustainable Internet is a European project **funded by the European Commission under the Horizon Europe Research and Innovation Programme** (call topic CL4-2022-HUMAN-01-03). It is part of the **European Commission's Next Generation Internet (NGI) initiative**

TRUSTCHAIN was launched in January 2023 to **empower innovators and end users trough 5 Open Calls to create a portfolio of Next Generation Internet protocols and an ecosystem of decentralised identity management software solutions** that is transparent to the user, interoperable, privacy aware and regulatory compliant that can seamlessly integrate and interoperate with any of the existing decentralised applications.

Up to 8,775 M€ funding and mentoring program with best international experts in their field as well as access to divers support services e.g. access to infrastructure, crypto-token for demonstration purposes, business development training, communication support.

TRUSTCHAIN 7 PARTNERS



NGI TRUST CHAIN

TRUSTCHAIN OBJECTIVE

The **spirit of the first-generation Internet** based on individual freedom, material progress, and moral community is slowly turning into individualism, materialism, and moralism, diverging from essential ethical and democratic principles that should underline this technology.

The **design choice of the past**, based on a mix of centrally managed networking and device technologies makes **today's Internet obsolete** when it comes to empowering all citizens to act for a more environmentally friendlier digital transformation, as well as to create a more resilient, inclusive, and democratic society, addressing inequalities and human rights, better prepared for and responsive to threats and disasters.

The **Next Generation Internet** should embed principles of human-rights, sustainability, ethics and other human values. This is the condition for **trusted relationships in the digital world.**

TRUSTCHAIN Objective is self-contained in the project name : to achieve a human centered, trustworthy and sustainable decentralised internet

How ?

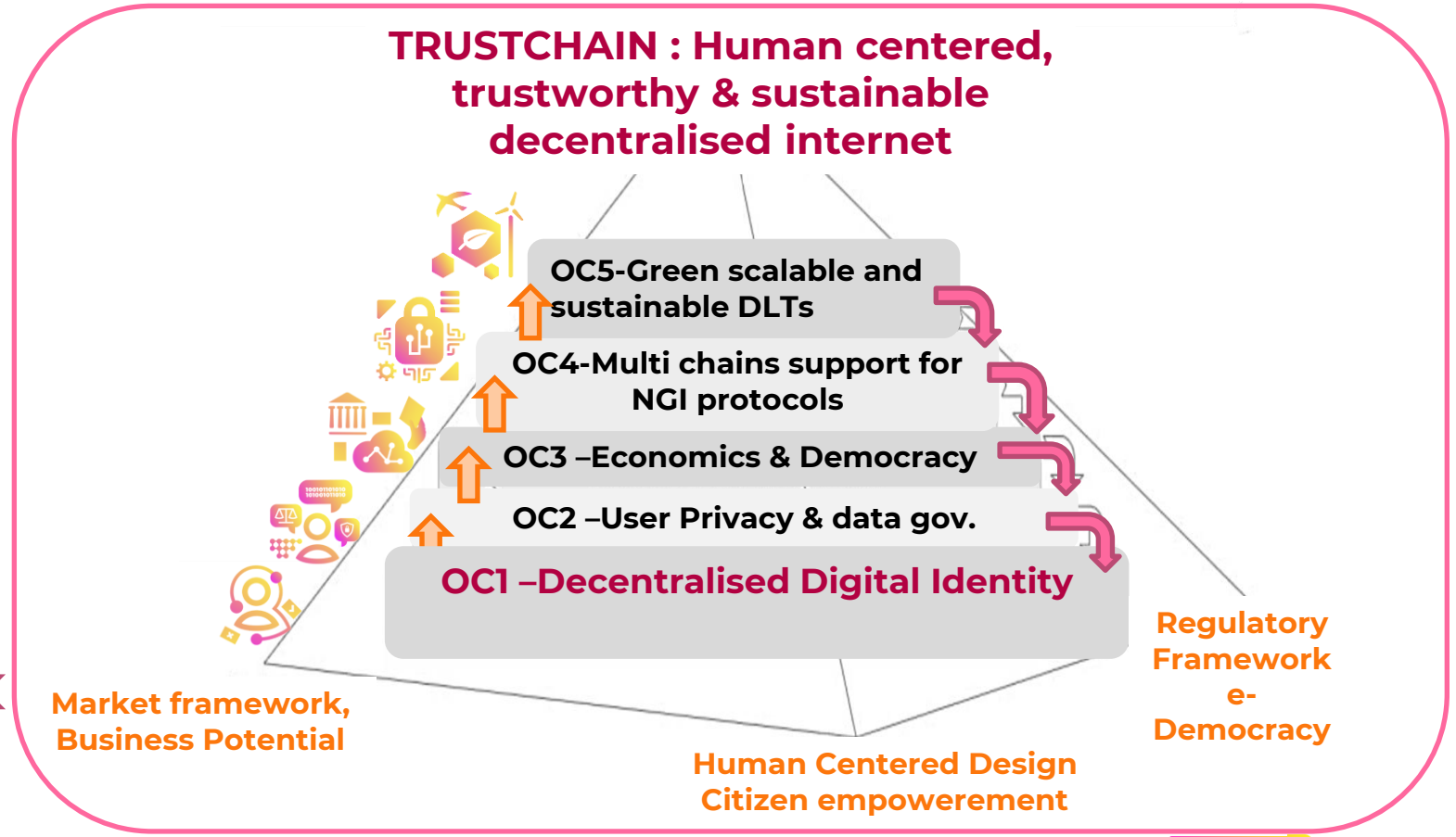
- **Co-creation with engagement of end users**
- **Provide democratic, transparent, traceable, and regulatory compliant mechanisms** that can support any ecosystem of entities and actors participating with their **digital identities**.
- Use **decentralised digital identity architectures** together with **IoT, AI, Cloud-to-Edge, DLT and DT** and **embed in such solution's important societal goals** in accordance with objective **truth** and therefore, **trustworthiness**.

TRUSTCHAIN DEVELOPMENT & IMPLEMENTATION

5 Open Calls

Each OC provides key technologies that can be used as basis for development in the subsequent calls, while also the opposite interaction can be employed by later calls

FOCUS ON OC1



TRUSTCHAIN OC1

AGENDA

- OC1 –Decentralised Identity Management
- Eligibility criteria and selection process
- How to apply
- Why to apply?
- Focus in some specific aspects to be covered in your proposal
  - The human centered approach In TRUSTCHAIN
  - Taking care of ethics aspects in TRUSTCHAIN
  - The Digital Identity Architecture and Reference Framework: Where do we stand? How to consider it in TRUSTCHAIN OC1

OC1 DECENTRALISED DIGITAL IDENTITY

Objective

To define and develop:

- A framework for decentralised user-centric identity management;
- Protocols for trustworthiness assessment of entities and their data by means of verifiable credentials and decentralized reputation systems;
- Smart oracles assessing the trustworthiness of data.

8th February 2023 (12:00 PM CET) until 10th April 2023 (17:00 CEST)

- **€ 1 755 000** distributed among up to 15 selected projects for 9 months duration
- Up to **K€ 117** per project

Applications that define, upgrade/extend the SoA, and develop the following types of solutions:

INDICATIVE

- **Decentralised user-centric identity management framework for supporting an automated privacy preserving, legal and regulatory compliant infrastructure (e.g., GDPR) potentially in alignment with emerging European regulations and standards (i.e. eIDAS).**
- **Protocols for trustworthiness assessment of entities by means of verifiable credentials and decentralized reputation systems.**
- **Smart oracles assessing the trustworthiness of data associated with digital identities.**
- **Inclusive digital identity platforms focusing on marginalized communities (e.g., refugees, elderly, vulnerable).**
- **Social identity for delegation and recovery that drives community-based trust establishment (i.e., social guardians).**
- **Systems considering both public and private administration roles in issuing and managing decentralized identifiers.**
- **Decentralized identity systems supporting Decentralized Authority Organizations (DAOs)**
- **Use-case driven identity management system deployment (e.g., banking, publishing, healthcare, education etc).**

ELLIGIBILITY CRITERIA & SELECTION PROCESS

What ?

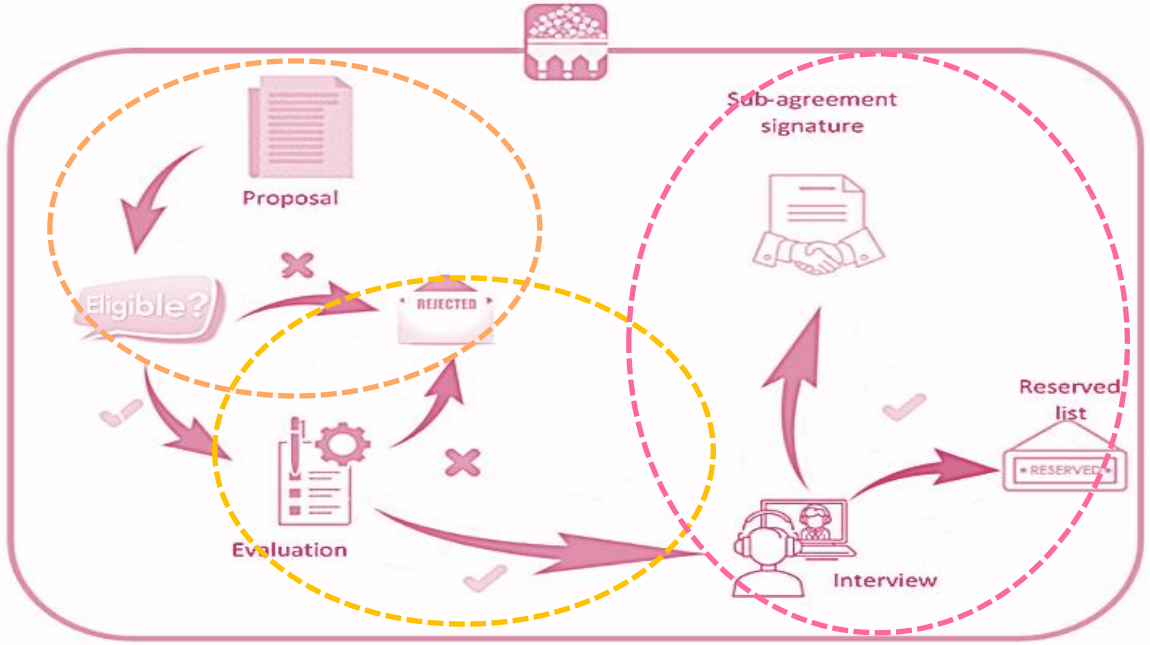
- **Indicative systems aforementioned** or solutions that **integrate one or more of them** as long as it serve TRUSTCHAIN vision
- Should **utilize existing concepts and technologies already developed for SSI** and fit within TRUSTCHAIN's vision and objectives
- Should be **open-source** and **achieving TRL 7**
- Should be **tested and evaluated by an adequate pool of potential users which should be identified in the application**
- Should be **supported by a self-sustaining business model** for exploiting the developed system at the end of the project
- Should **use standard technology for full-stack development that is compatible with current standards**.

Who ?

Developers, innovators, researchers, SMEs and entrepreneurs working on different NGI relevant topics and application domains **at the intersection between the technical field** (e.g Software Engineering, Network Security, Semantic Web, Cryptography, Blockchain, Digital Twin, Blockchain Security, Digital Identity, Blockchain Protocol), **the Social sciences and Humanities** (e.g Social Innovation, not-for-profit sector, Social Entrepreneurship, public goods) **as well as any others including economics, environment, art, design, which can contribute to NGI TRUSTCHAIN relevant vision**

Selection process

3 phases: Eligibility check, proposal evaluation & online interview



Up to 15 projects selected

HOW TO APPLY ?

- **Entry point for all proposals**

https://www.f6s.com/trustchain-open-call-1/apply

Submission received by any other channel will be automatically discarded

- **Provide a comprehensive research proposal according to the TRUSTCHAIN template and instruction set in the guidelines for Applicant**

- **Fill in the administrative part including any obligatory supporting documents specified in the guide for Applicant**

Tips and tricks for a good proposal

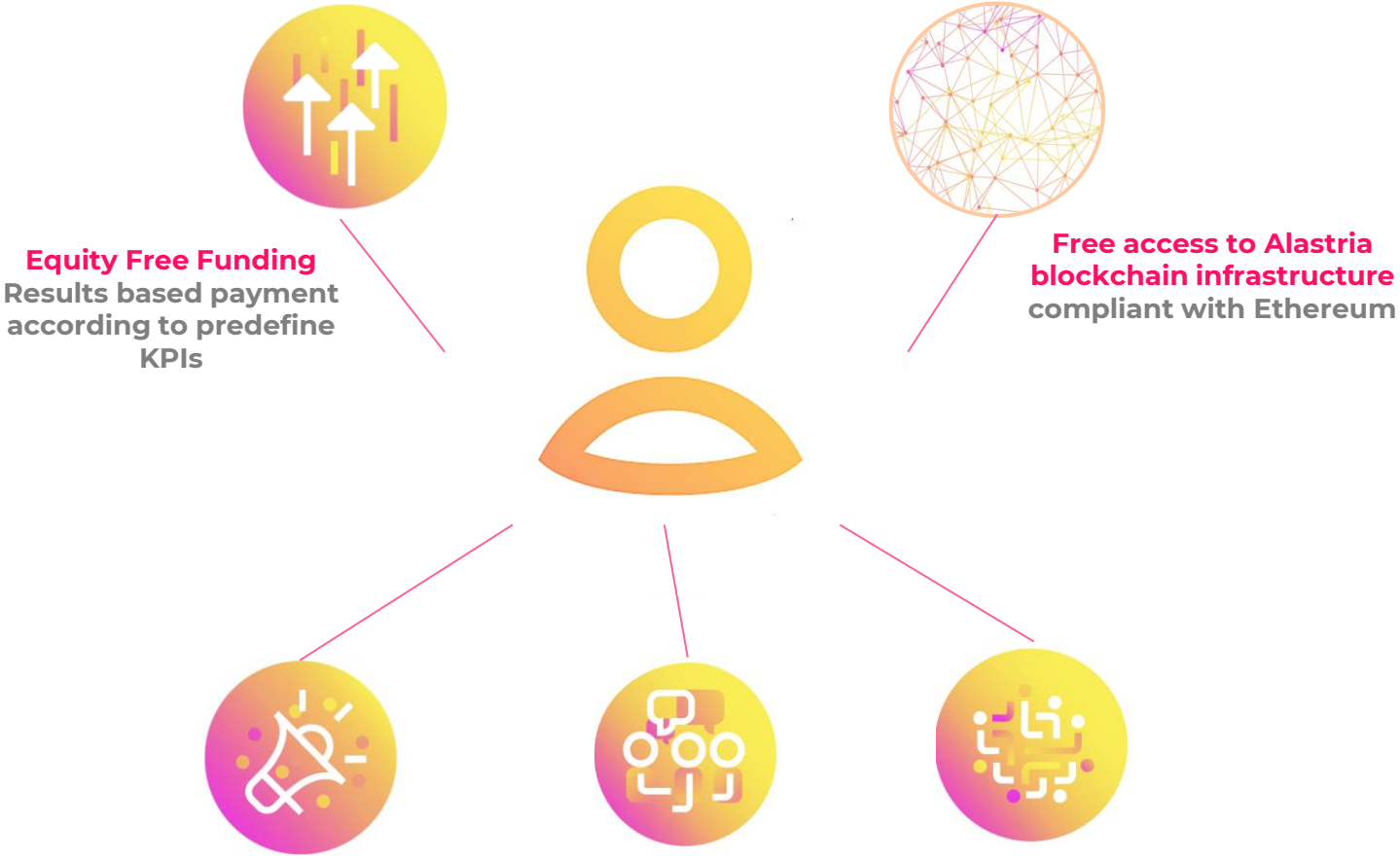
1. **Read carefully the TRUSTCHAIN Open Call 1 document and Guide for Applicant**
2. **Check carefully the eligibility criteria**
3. **Take a look at the FAQs on our website**
4. **Use the official TRUSTCHAIN template for your proposal**

https://trustchain.ngi.eu

https://www.f6s.com/trustchain-open-call-1

WHY TO APPLY?

TRUSTCHAIN will offer you **equity free funding**, **coaching on technical and business aspects** , **access to top infrastructure** as well as **visibility, promotion support** & **networking**.



Equity Free Funding
Results based payment according to predefine KPIs

Free access to Alastria blockchain infrastructure
compliant with Ethereum

Coaching support services
Access to various expertise for scaling up innovative business

Visibility & promotion
towards TrustChain community

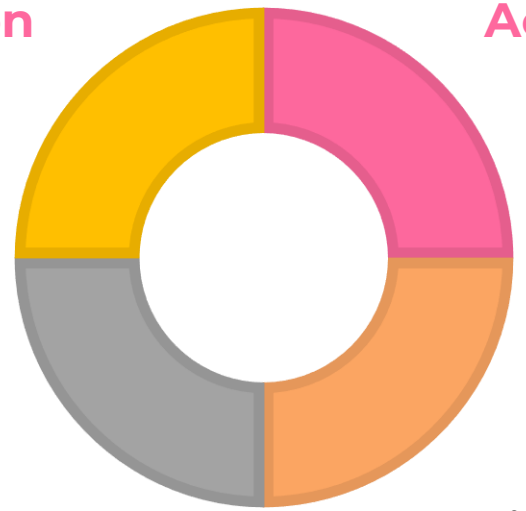
Networking
Access to a wider NGI community, Matchmaking service between innovators, connections with some accelerators and/or venture capitalists for the ones who end up implementing the solutions.

FOCUS IN SOME SPECIFIC ASPECTS TO BE COVERED IN YOUR PROPOSAL

ENSURING THE IMPLEMENTATION OF AN USERS CENTRED APPROACH IN TRUSTCHAIN OC1

Validation/ Evaluation

Ideation: Active listening



Development

Design: Implement the user requirements

1. Identify who are the end-users of your tool.
2. Incorporate them in the process of ideation:

   Qualitative methods examples:
   1. Workshops
   2. Focus Groups
3. Once the tool is developed, end-users need to validate the tool.

No matter how large is **the sample** but it **needs to be representative** of your end users.

TAKING CARE OF ETHICS ASPECTS IN TRUSTCHAIN

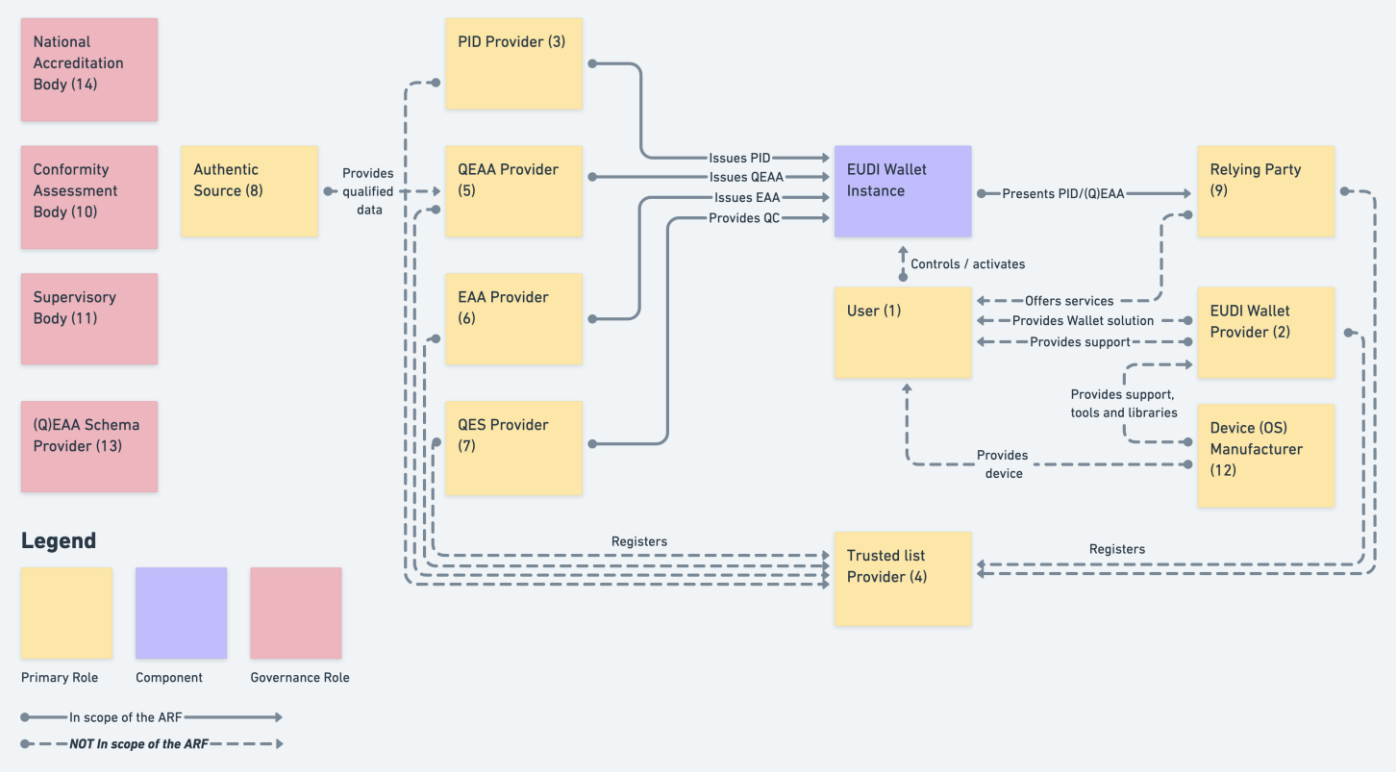
- Assess the ethical aspects of your project using the **ethics questionnaire** in the guide for applicants (Administrative Form)! It is the applicant's responsibility!

Any potential infringement of ethics principles and/or any potential harm, can result in the rejection of your proposal.

- (Arguably) most relevant topic to be addressed ➔ Data protection (GDPR):
  - Whenever you process **personal data** as part of your project
  - Main obligations are:
    - Inform data subjects
    - Ensure having a legal basis for processing (e.g. consent when required)
    - Consult your DPO if you have one
- Seek, when required, approval from an **external, independent advisor** on the measures you propose to mitigate any ethical risks (e.g. an independent, experienced data protection expert) or, if mandatory, from an external ethics/data protection body!

THE DIGITAL IDENTITY ARCHITECTURE AND REFERENCE FRAMEWORK: WHERE DO WE STAND? HOW TO CONSIDER IT IN TRUSTCHAIN OC1

- Mainstream Digital Identity is going to be well-supported by eIDAS2 and the European Digital Identity Wallet Architecture and Reference Framework (ARF)
- ARF should be used as guiding principles.
- But use cases should not be limited by ARF, and should focus on human-centred innovative digital identity systems.



Source: https://digital-strategy.ec.europa.eu/en/library/european-digital-identity-wallet-architecture-and-reference-framework

STAY UPDATED AND GET INVOLVED!

Follow us

trustchain.ngi.eu

Thank you !

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JOIN OUR NEXT WEBINAR

March 27th – 11 AM CET

SIGN UP NOW

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