

TRUSTCHAIN OC2: USER PRIVACY AND DATA GOVERNANCE

First webinar for Applicants

TRUSTCHAIN Consortium 31/07/2023



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University of Ljubljana Faculty of Computer and Information Science









TRUSTCHAIN

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TRUSTCHAIN IN BRIEF

TRUSTCHAIN - Fostering a Human-Centred, Trustworthy and Sustainable Internet

- European project Horizon Europe Research and Innovation Programme (call topic CL4-2022-HUMAN-01-03).
- Member of the European Commission's Next Generation Internet initiative (NGI)
- Cascade funding project launched in January 2023

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., business development training, legal and regulatory training, communication support) and infrastructure (e.g., Alastria Blockchain)



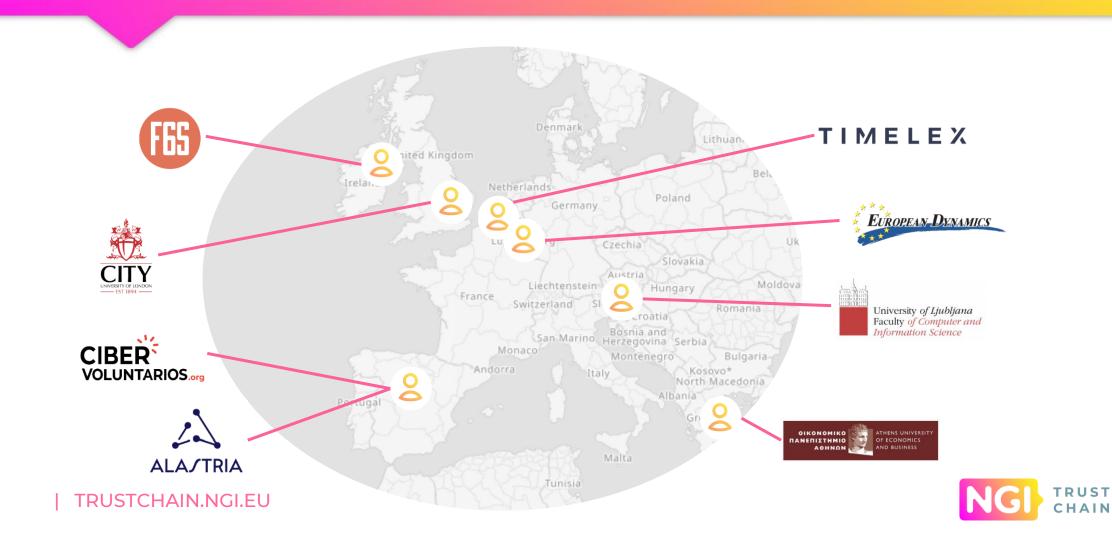
To achieve a human centered, trustworthy and sustainable decentralised internet

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 are transparent to the user, interoperable, privacy aware, regulatory compliant and that can seamlessly integrate and interoperate with any of existing decentralised applications.



TRUSTCHAIN 7 PARTNERS

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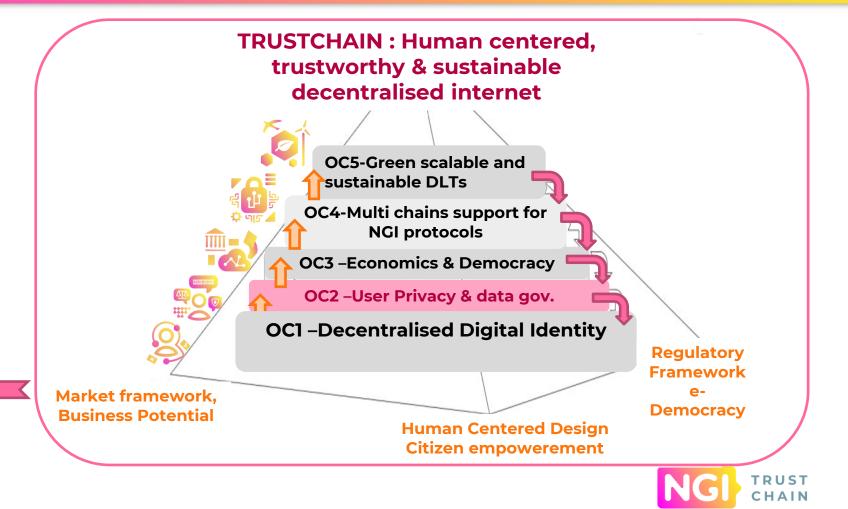


TRUSTCHAIN IMPLEMENTATION

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





TRUSTCHAIN OVERALL APPROACH

Whatever the call:

- <u>Co-creation</u> with engagement of end users since the requirement/specification phase till the validation of the proposed solution
- **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, Cloudto-Edge, DLT and DT and embed in such solution's important societal goals in accordance with objective truth and therefore, trustworthiness.



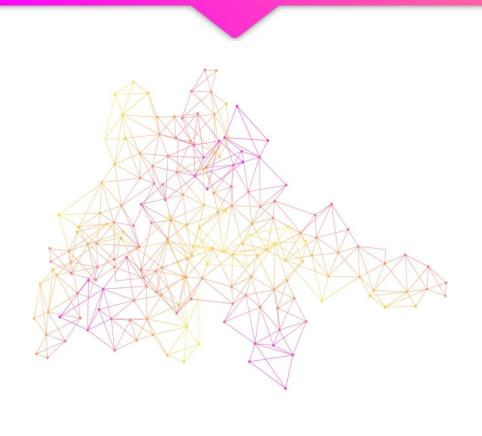
TRUSTCHAIN OC2

User privacy and data governance





AGENDA



- o OC2 User privacy and data governance
- Focus in some specific aspects to be covered in your proposal
 - What do you need to explain in your proposal?
 - The human centered approach In TRUSTCHAIN
 - Taking care of ethics aspects in TRUSTCHAIN
- Eligibility criteria and selection process
- How to apply and why?
- FAQs
- o Q&As





OC2 USER PRIVACY & DATA GOVERNANCE

20th July 2023 until 20th September 2023 (17:00 CEST)



- €1989 000 distributed among up to 17 selected projects for 9 months
- O Up to **K€ 117** per project

The focus is on trustworthy online platforms that preserve user's data privacy & provide strong data governance frameworks.



- You are invited to submit your proposals on any topic that serves the OC2 vision and objectives with as minimal requirement :
- Adopt a co-creation process with end users from requirements elicitation till validation
- Use standard technology for full stack development,
- Be open source and desirably reach TRL 7,
- Extend the state-of-the-art in the domain of user privacy, and/or solve existing realworld problems with data governance and provide new highly usable software



OC2 USER PRIVACY & DATA GOVERNANCE

To develop tools, cryptographic mechanisms, and other algorithms for data handling & sharing as well as for the management of data lakes in compliance with the GDPR and other regulations that implement techniques such as:

- Mechanisms for multi-party data sharing,
- Protocols for privacy-preserving data sharing using techniques from technologies such as federated learning both vertical and horizontal framework,
- Privacy-preserving data processing, data storage and data computation techniques such as differential privacy, data obfuscation/perturbation, anonymization techniques,
- Encrypted data analytics based on homomorphic encryption and Trusted Execution Environment,
- Protocols to verify authenticity and accuracy of data using technologies like zero knowledge proofs,
- Protocols to support the digital sovereignty-based data flow and data spaces initiatives. Data identification, data provenance, data tracking mechanisms or protocols should be built so that the data that is exchanged can be tracked, so that trustworthy data handling according to the user consent can be verified.



WHAT ARE WE LOOKING FOR? (INDICATIVE)

Applications that will clearly define, upgrade/extend the state-of-the-art, and develop the following types of solutions:

• Enhanced Consent profiles to implement transparent & user-friendly consent mechanisms that clearly explain how user data will be collected, used, and shared.

• Data Minimization and Purpose Limitation techniques built in the web framework so that only necessary data is collected for legitimate purposes.

• Secure data exchange & privacy-aware data processing must be the cornerstone of the new data economy. Privacy of training data, machine-learning models & model parameters should be aimed for.

• Developing new privacy preserving data flow techniques in line with international data sharing agreements so that the user has choice to tune data parameters for trading/sharing of data.

• Develop new mechanisms in line with the international data flows standards so that the data can move freely within the EU & across international borders including USA, Japan and China.

• Data identification, data provenance, data tracking mechanisms should be built so that the data that is exchanged can be tracked. Handling of the data according to the user consent provided in a data exchange should be verifiable.

• Data certification/verification methods should be developed to verify the trustworthiness of the data.

• Modern privacy enhancing technologies, such as local differential privacy and other interactive privacy techniques, taking also into account online publicly available datasets that can be linked to the original data.

• Data obfuscation, perturbation and anonymization techniques or their combination that properly address the trade-off between privacy-preservation and data utility.



FOCUS IN SOME SPECIFIC ASPECTS TO BE COVERED IN YOUR PROPOSAL

WHAT DO YOU NEED TO EXPLAIN?



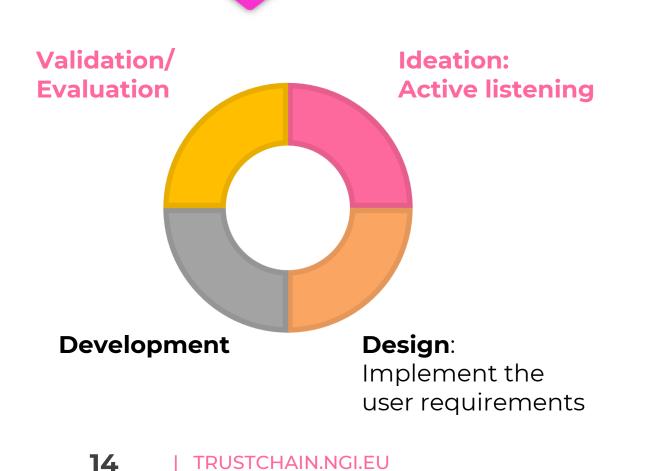
Using the mandatory TRUSTCHAIN proposal template, what do you need to explain?

- The specific technological innovation you propose to develop and how it is clearly different from alternative solutions that are already available in the market, or developed by previous EU research and innovation actions,
- The specific user privacy and data governance needs or challenge you propose to address and who would benefit from it immediately and in the longer term, in particular you should clearly specify the OC2 challenges you are going to address.
- Any challenges or opportunities relating to equality, diversity, ethics, and inclusion arising from your project,
- Whether your innovation will focus on the development of new solutions for existing areas, or a totally disruptive approach or idea,
- Any work you have already done to respond to this need, for example if your project focuses on developing an existing capability or building a new one,
- Explain how your proposed solutions will align with the building blocks developed as part of the OCI call on digital identity
- Explain how you intend to engage end users in the co-creation process.





ENSURING THE IMPLEMENTATION OF AN USERS CENTRED APPROACH IN TRUSTCHAIN OC2



- 1. Identify who are the end-users of your tool.
- 2. Incorporate them in the process of ideation:
- 3. Qualitative methods examples:
 - 1. Workshops
 - 2. Focus Groups
 - 3. Interviews
- 4. 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.

- o (Arguably) most relevant topic to be addressed → Data protection (GDPR):
 - Whenever you process **personal data** as part of your project
 - Main obligations are:
 - o 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!





ELLIGIBILITY CRITERIA & SELECTION PROCESS

WHO AND SELECTION PROCESS

Who?

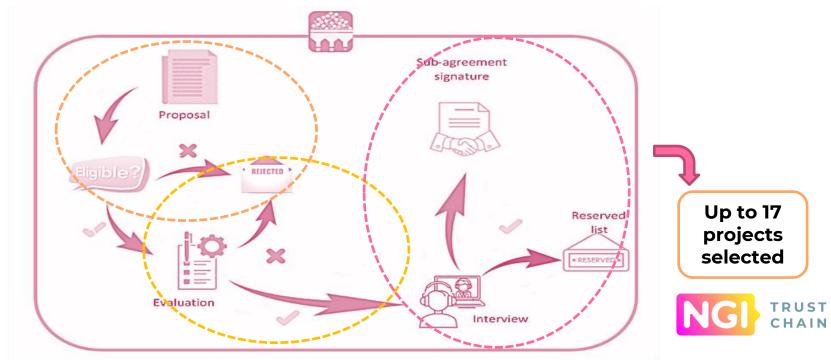
- Developers, innovators, researchers, academics, SMEs and entrepreneurs working on different NGI relevant topics and application domains at the intersection between the technical field, the Social sciences and Humanities as well as any others including economics, environment, art, design, which can contribute to NGI TRUSTCHAIN relevant vision

- Eligible countries
- Eligible type of applicant

Selection process

- 1. Eligibility check
- 2. Proposal evaluation
- 3. Online interview







HOW AND WHY TO APPLY?

HOW TO APPLY ?

• Entry point for all proposals

https://www.f6s.com/trustchain-open-call-2/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



Read carefully the TRUSTCHAIN Open Call 2 document and Guide for Applicant



Check carefully the eligibility criteria

Take a look at the FAQs on our website



Use the official OC2 TRUSTCHAIN template for your proposal



https://trustchain.ngi.eu

https://www.f6s.com/trustchain-open-call-2



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.



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Free access to Alastria **Equity Free Funding** blockchain infrastructure **Results based payment** compliant with Ethereum according to predefine **KPIs Visibility & promotion Coaching support services Networking**

Access to various expertise for scaling up innovative business

towards TrustChain community

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.

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SOME FAQs

What are OC2 TRUSTCHAIN timelines?

- Call announcement: 20 July 2023
- Call closure and submission deadline: 20 September 2023 at 17:00 CEST
- Evaluation period: Up to three months after call closure
- Signature of sub-grant agreement: Up to one month after the announcement of the final list of selected projects
- Projects: From January 2024 to September 2024 (9 months)

What is cascade funding?

Also known as Financial Support to Third Parties (FSTP), it is a mechanism of the European Commission to distribute public funds in order to create new companies, increase their scalability, SMEs and / or mid-cap companies, in the adoption or development of digital innovation. The main objective of this financing method is to simplify administrative procedures with SMEs, thus allowing some projects financed by the EU to issue, in turn, open calls to obtain more funding.



Where does the funding come from?

Funding is given by the TrustChain project under a <u>Sub-Grant Agreement</u> signed by selected applicants and the TrustChain consortium. Funds are from the European Commission (Horizon Europe Framework Programme), which uses TrustChain as intermediary.

How does the funding mechanism work?

The funding mechanism relies on a cascade-funding scheme involving Horizon Europe funds. The scheme is based on a Grant Agreement signed by the European Commission and the TrustChain consortium partners. The Consortium partners receive the HE funds which are then transferred to the winners of the TrustChain Open Calls based on the rules and regulations explained in the <u>Guide for Applicants</u> (Open Call #2). It means that funds received by call winners are Horizon Europe funds.



Who is eligible for TrustChain Open Calls?

Applicants can apply as individuals or linked to a legal entity. Hence, the participation is possible in several ways: •Team of natural person(s): Team of individuals, all established in any eligible country. This does not consider the country of origin but the residence permit.

•Legal entity(ies): One or more entities (consortium) established in an eligible country. It can be universities, research centres, NGOs, foundations, micro, small and medium sized enterprises (see definition of SME according to the Commission Recommendation 2003/361/EC), large enterprises working on Internet or/and other related technologies are eligible.

•Any combination of the above.

What are the countries eligible for funding under TrustChain Open Calls?

Only applicants legally established/resident in any of the following countries (hereafter collectively identified as the "Eligible Countries") are eligible:

•The **Member States** (MS) of the European Union (EU), including their outermost regions.

•The Overseas Countries and Territories (OCT) linked to the Member States;

•Horizon Europe associated countries, as described in the <u>Reference Documents</u> and the <u>List of Participating</u> Countries in Horizon Europe according to the latest list published by the European Commission.

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Can I submit several projects to one specific call?

Open Calls are competitive and applicants should focus on one specific topic, so TrustChain consortium recommends you to submit one application per call, whether you are a legal entity and/ or a team of natural persons. In the event of multiple submissions, only the last one received (timestamp of the F6S system) will be considered for the evaluation process. Any other submitted proposals involving the same applicant will be declared non-eligible and will not be evaluated in any case.

Can I apply to TrustChain five Open Calls?

Yes, you can. However, note that the maximum funding eligible per third party within the TrustChain project is limited to €200,000.





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Thank you !







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September 4th – 11 AM CET

SIGN UP NOW



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