

The logo for NGI (National and University Research Infrastructure) is displayed in white text inside a teal speech bubble shape.

TRUBLO
DISTRIBUTED TRUST

THE TRUBLO OPEN CALL 1

TEXT

18/01/2021



Grant Agreement No.: 957228
Call: H2020-ICT-2018-2020
Topic: ICT-54-2020
Type of action: RIA

WWW.TRUBLO.EU

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The TRUBLO Consortium is the following:

Name	Acronym	Country
WORLDLINE IBERIA SA	WLI	Spain
INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS	ICCS	Greece
ATHENS TECHNOLOGY CENTER ANONYMI BIOMICHANIKI EMPORIKI KAI TECHNIKI ETAIREIA EFARMOGON YPSILIS TECHNOLOGIAS	ATC	Greece
DEUTSCHE WELLE	DW	Germany
F6S NETWORK LIMITED	F6S	Ireland
CONSORCIO RED ALASTRIA	ALASTRIA	Spain

1. TRUBLO IN BRIEF

1.1 GENERAL FRAME

TRUBLO - Trusted and reliable content on future blockchains, is a European project funded by the European Commission under the European Union's Horizon 2020 Research and Innovation Programme, and part of the European Commission's Next Generation Internet (NGI) initiative. TRUBLO was launched in September 2020 to nurture and facilitate beyond the state-of-the-art research on blockchain technology which will lead to more scalable blockchain based solutions and applications, that will contribute to ensuring the exchange of trustworthy and reliable content on social networks and media.

TRUBLO offers through 3 Open Calls, up to 4,2M€ funding and support services to empower academic teams, researchers, SMEs and startups to define and implement small scale research projects for the development of new software, platforms or tools for distributed trust.

1.2 TRUBLO SUMMARY

As societies and human/social networks grow, people increasingly turn to digital networks for direct and far more functional ways of finding and disseminating information. In such networks, trust in the medium and disseminating information and content has inevitably to rely more and more on technologically assisted means. Blockchain technology can contribute to the evolution of Next Generation Internet towards high levels of Distributed Trust in seamless and unobtrusive ways increasing in a transparent way the trustworthiness of content shared through future media. Trust is essential to societies, and blockchain has the potential to shift trust in people and institutions to trust in the technology that is used.

In this context TRUBLO aims to invite research teams to develop projects that nurture and facilitate the creation of tools for distributed trust, by exploring and using blockchain technology. The perspective is that such work will lead to fully scalable blockchain based solutions and applications for trustable content.

TRUBLO aim is to invite is to showcase ground-breaking research results from selected projects, that demonstrated the potential to create higher research, social and economic impacts, combined with the potential to generate new value into the media & internet market. The programme also aims to support the emerge of innovative models and disruptive solutions to communicate and transmit content and bring them closer to market. To achieve this, the project will implement a series of three open calls which are directed **at academic teams, researchers, SMEs and startups** to define and implement small scale research projects on **one of the two topics**:

- Topic Trust and reputation models on blockchains:

When users access information and news sites in the future: Which are the sites which can be trusted based on several categories including quality, intention, bias and factual correctness. The use case challenge here is to find mechanisms, supported by blockchain or similar concepts, which are simple and effective at the same time - thus leading to wide acceptance. Ideally, the introduction of such tools and solutions can be measured towards a gradual decline of misinformation, at least on major social and news channels.

Through the trustworthiness and tamper-proof aspect of information stored on blockchains, different multimedia and news items producers (e.g. News Agencies) can be evaluated regarding the information they produce. The evaluation process takes into consideration aspects such as quality, intention, bias and factual correctness. The outcome of this process is to mark these producers as trustworthy or not.

Subsequently, a user can check the trustworthiness on a specific item. Furthermore, services that intend to consume multimedia items from various producers can restrict their selection range to include only trusted sources. Hence the trustability of the content is assured.

Topic Trust and reputation models on blockchains targets innovative applications, technologies, technical approaches and methodologies that will increase the levels of trust in blockchain based information exchange. Emphasis will be put on user generated content on the internet and social media. Moreover, data from IoT infrastructures will be considered as well to ensure transparency and accountability on infrastructures created by end-users.

- Topic Proof-of-validity and proof-of-location:

- Proof-of-location

The focus here is on innovative ways to ensure that content is valid across several dimensions:

- Validity in time (data or facts presented are not old and overcome).
- Validity of content (facts are correct or if disputable marked as such).
- Validity in location for any multimedia content (videos/photos).
- Links and sources can be reached for checking.

There might be more facets for validity, potentially a bundle of elements and layers, resulting in generally valid products or information bits.

Proof-of-location is a category in its own. From the perspective of a media company proof-of-location applies to people working for the organisation as well as to people claiming to be from a location or at a location.

A second line relevant is that visuals such as photos or videos claiming to show a specific location have additional information, proof or metadata that the claim and the location are correct. Proof-of-location should therefore provide a mechanism to ensure that these claims are correct and valid. Proof-of-location can also apply to products, e.g. to enable trust in the claimed place of origin/production for an item.

- Proof-of-validity

During the evaluation of the trustworthiness of a multimedia item, several checks are included to mark the item as trusted. These checks regard:

- Proof of time: the event described takes place in the timeframe it is described.
- Proof of content: the event described corresponds to the content.
- Proof of location: the event described takes place in a geolocation district.
- Proof of confirmation: the event described can be doublechecked based on reference links or additional sources.

These four parallel processes contribute to the trustworthiness of information since there is a multilayer validity check mechanism.

In a real-life example, when a user is presented with a breaking news event (which is an event taking place in a very specific place/time e.g.), the item has to satisfy all of the above criteria.

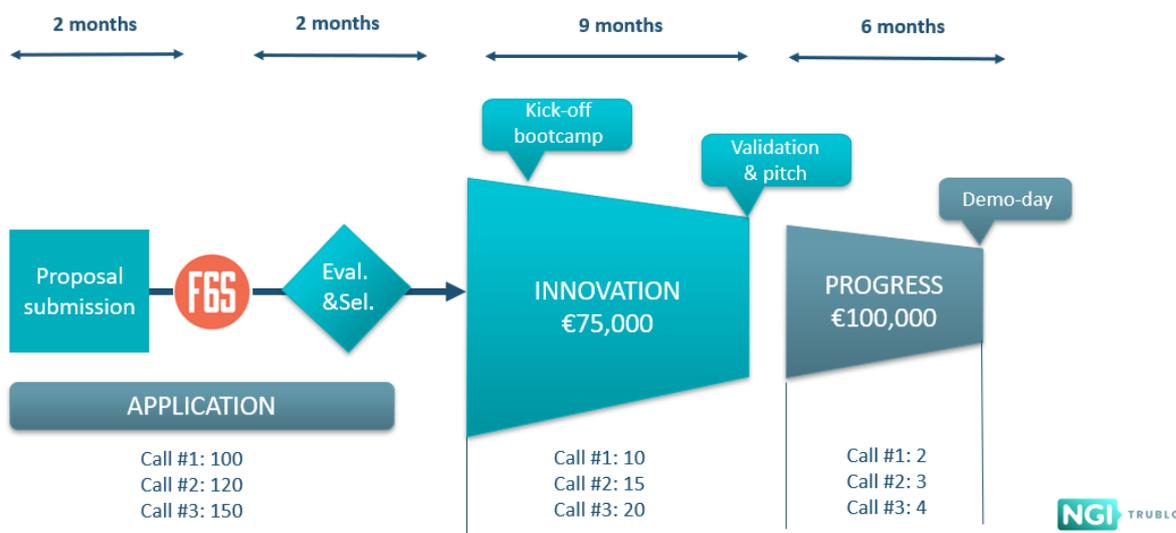
The user can be informed thus that the content of the item corresponds to the event described as opposed to possible archive material of a different relevant event.

In **Topic Proof-of-validity and proof-of-location**, the focus is on innovative mechanisms to increase transparency and trustworthiness of user generated genuine content. The content to be considered here is mainly genuine user-generated content captured from users’ mobile devices. The users, as being part of a blockchain, can apply additional verification mechanisms to increase transparency, validity and high level of trustworthiness, such as Proof- of-Location and Proof-of Validity.

1.3 TRUBLO PROGRAMME

Through its open calls, TRUBLO aims to stimulate the technology researchers, startups and SMEs to participate in the TRUBLO programme where they will have access to technology framework and support to generate new value with the initial research concepts. The TRUBLO programme is a 15-month long support programme divided into 2 stages(INNOVATION and PROGRESS), each divided into three-month sprints. Each stage is associated with a specific technology framework and services package to accelerate and enhance the development of new products and services that foster trust in internet information exchange and content.

In all stages, selcted teams will receive technical and buisness support (as describe in section 8 of the annex 2 ‘Guide for applicant’).



The two phases (INNOVATION and PROGRESS) are presented in detailed tables hereafter. Each table elaborate in particular on the requirements, the constraints to be addressed as well as on the expected deliverables, expected results and impacts of each activity.

1.3.1 PHASE 1 INNOVATION

Phase 1 Innovation	
Objectives	The 10 selected teams will be developing their proposed TRUBLO projects in collaboration/ connection with their networks, sector

	<p>specialists and technology experts, by making use of the TRUBLO blockchain infrastructure and supporting services. The teams will work at their own facilities and occasionally participate in meetings, workshops and training organized by the consortium.</p> <p>What they have to deliver at the end as minimum deliverables is a Whitepaper describing their solution and the impact it can have in the NGI and Media industry and a scientific publication in a prestigious open access journal with high impact.</p> <ul style="list-style-type: none"> • R&D activities from concept to validation • Participation in TruBlo kick-off bootcamp, webinars, etc. • Presentation/sharing results to community • open software/ hardware
<p>Expected results and Deliverables</p>	<ul style="list-style-type: none"> • At least one scientific publication in prestigious and open access journal • Validation of a research concept in a specific environment (preferably in Alastria infrastructure but not obligatory for the participating teams) • White paper / Technical report with the description of the research result and analysis on the impact it can have in the industry • Publication of additional papers in other conferences, magazines and journals (optional result) <p>Third parties taking part in the Innovation Phase will perform basic and applied research and have to produce beyond the state of the art scientific results. The monitoring of the progress during the Innovation phase will be based in the completion and evaluation of deliverables:</p> <ul style="list-style-type: none"> • M1: D1.1 Full Research and Innovation Project Proposal • M3: D1.2 Project Solution Design and Business Applicability • M6: D1.3 Technical Report • M9: D1.4 White paper and Scientific or Business Publication or PoC <p>The amount assigned to the Innovation Phase will be distributed in payments associated with results and milestones described in 5.1 and 5.2. in Annex 2 “Guide for Applicants”.</p>
<p>Duration</p>	<p>9 months</p>



Funding	<ul style="list-style-type: none"> • Total funding up to €75,000.¹ • Distributed over sprints of 3 months each (Confirmation 30%, sprint 1: 20%; Sprint 2: 30%; Sprint 3: 20%) and according to the achievement of specific defined milestones/ objectives and participation in TruBlo events/ bootcamps
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1.3.2 PHASE 2 PROGRESS

Phase 2 Progress	
Objectives	<p>Selected teams will develop activities associated with the demonstration/ piloting as well as promotion and exploitation of their project, building an MVP as demonstrator and aiming to engage new customers and/or partners and/or investors. The teams will work remotely (at their space) or with potential pilot customer and participate in several meetings and events where they can promote their project's goals and outcomes. The third-parties will also deliver a Whitepaper describing the evaluation and potential impact of their MVP and present their results in a demo day.</p> <ul style="list-style-type: none"> • Build synergies and have cross-collaboration activities with other projects and/or stakeholders • Create a Proof of Concept and Minimum Viable Product (MVP) • Validation of MVP in a specific environment (preferably in Alastria infrastructure but not obligatory for the participating teams) • Work together with potential users / customers (early adopters) • Participate in knowledge transfer events organised by TRUBLO Consortium
Expected results and Deliverables	<ul style="list-style-type: none"> • MVP in form of a prototype / demonstrator • Demonstration of developed solution with users / customers • Collection of insights and assessment report • Business Model Canvas • White paper detailing the technical aspects of the MVP along with an analysis of future potential and impact

¹ Budget for Legal Entities. Budget per stakeholder type is detailed in annex 2 “Guide for Applicants” section 5.1.

	<ul style="list-style-type: none"> Scientific publications and jointly authored publications with other teams (optional result). <p>A similar monitoring process will be applied for the Progress Phase. This will be mainly focused in the development of an MVP with the adequate business approach supported by the completion and evaluation of deliverables:</p> <ul style="list-style-type: none"> M10: D2.1 Detailed Development Plan M12: D2.2 Detailed Development Plan Monitoring. D2.3 Validation Plan M15: D2.4 Report of MVP. D2.5 Demonstration of developed solution with users. D2.6 White Paper. D2.7 Business Plan The total amount assigned to the Innovation Phase will be distributed in payments associated with results and milestones described in 5.1 and 5.2 in Annex 2 “Guide for Applicants”.
Duration	6 months
Funding	<ul style="list-style-type: none"> Total funding up to €100,000². Distributed over two sprints of three months each and according to the achievement of specific defined milestones/ objectives and participation in TRUBLO events/ bootcamps (Validation & Pitch: 30%, Delivery plan in sprint 1: 20%; Mentor Meeting in Sprint 2: 50%)

2. OPEN CALL 1

The TRUBLO open call is the entry point for access to direct funding and for integrate the TRUBLO Programme (see description above 2.).

The 1st open call aims at initially selecting up to 10 projects led and executed by a critical number of developers, innovators, researchers, SMEs and entrepreneurs among others, actively involved in research, development and application activities in the fields of Blockchain related technologies.

The TRUBLO open call will be opened from **January 18th, 2021 to March 19th 2021**.

Applications should be made through the F6S platform only.

² Budget for Legal Entities. Please see “Guide for Applicants” section 5.1 for Budget per stakeholder type.



Please see annex 2 “Guide for Applicants” for more details on submission of a proposal application, funding, eligibility, technical and service support.

Deadline: 19th March 2021 at 17:00 CET (Brussels time)

Call identifier: TRUBLO Open Call 1

Language in which proposal should be submitted: English

Please note that opening and closing dates of TRUBLO Call can be subject to change in case of any modifications in the project’s schedule.



2.1 ANNOUNCEMENT

Call Title:	TRUBLO Open Call 1
Full name of the EU funded project:	Trusted and reliable content on future blockchains
Project acronym:	TRUBLO
Grant agreement number:	H2020 - 957228
Call publication date:	18th January 2021 at 12:00 PM CET
Call deadline:	19th March 2021 at 17:00 CET
Expected duration of participation:	15 months programme split in 2 phases (9 + 6 months)
Total EU funding available:	€ 950.000
Task description:	<p>TRUBLO will nurture the beyond the state-of-the-art research on blockchain technology and foster the development of new software, platforms or tools for distributed trust.</p> <p>The objective of the TRUBLO Open Call is to stimulate research teams led by developers, innovators, researchers, SMEs, entrepreneurs and academia to define and implement small scale research projects on one of the two topics: Topic Trust and reputation models on blockchains; Topic Proof-of-validity and proof-of-location.</p> <p>In order to empower the innovation potential of European research teams, TRUBLO aims to provide access to specialised knowledge, technology, capital and markets through a 15-moth support programme, divided into 2 stages: INNOVATION and PROGRESS. Each stage is associated with a specific technology framework and services package to accelerate and enhance the development of new products and services that foster trust in internet information exchange and content.</p> <p>Through participation in the TRUBLO programme, the selected projects should have potential to entail a substantial advance in the state of the art, deliver results with the potential to create higher research, social and economic impacts, combined with the potential to generate new value into the media & internet market.</p>

Submission & evaluation process:	<p>The open call is broken down in 3 phases:</p> <ul style="list-style-type: none"> • Phase 1. Innovation (9 months), • Phase 2. Progress (6 months). <p>For phase 1, up to 10 projects will be selected to conceptualize a research project for 1 of the 2 focus aforementioned (first Top ranked proposals will be retained).</p> <p>Then, for phase 2, from the initial pool of 10 projects, a subset of 2 projects will be retained based on their quality to elaborate the concept proposed in phase 1 and prepare design specifications of the solutions to be implemented with potential users / customers.</p> <p>The evaluation of proposals is carried out by the TRUBLO Consortium with the assistance of independent experts.</p> <p>The maximum amount of funding that each beneficiary may receive during the TRUBLO call 1 is subject to the legal status of the applicant (cf. Annex 3 “Guide for applicant”).</p> <p>The submission will be done via the F6S platform:</p> <p>https://www.f6s.com/trublopencall/apply</p> <p>The applicants are required to register first a profile at FS6 to be able to submit their proposal.</p>
Further information:	Further details are available at: https://www.trublo.eu/apply/

3. SUPPORT TO APPLICANTS & KIT FOR APPLICANTS

3.1 SUPPORT TO APPLICANTS

The TRUBLO consortium will provide information to the applicants only via support@trublo.eu. No binding information will be provided via any other means (e.g. telephone or email).

- ➔ More info at: <https://www.f6s.com/trublopencall/apply>
- ➔ Apply via: <https://www.f6s.com/trubloapply>
- ➔ Support team: support@trublo.eu

3.2 KIT FOR APPLICATION

The TRUBLO Open Call 1 supported material is the following:

- The TRUBLO Open Call 1 text

The present document.

- The TRUBLO Guide for applicant

This document provide in details the information to help apply to the TRUBLO Open Call 1 such as an abstract of the TRUBLO action, a detailed description of the TRUBLO open call 1, the modalities for application, the evaluation process, the scheme of the funding support, the IPR aspects related to TRUBLO and how to prepare and submit a proposal:

It is available at: <https://www.trublo.eu/apply/>

- The TRUBLO Application material

Proposal description template:

available at: <https://www.trublo.eu/apply/>

TRUBLO additional applicant's template:

available at: <https://www.trublo.eu/apply/>

