

# NGI

Partnership for innovative technological solutions to ensure privacy & enhance trust for the human-centric Internet

Webinar, 3 April 2020



# Webinar - schedule

Timing	Topic
11:00 - 11:15	Introduction by Alasdair Reid, NGI Trust coordinator
11:15 - 11:45	Q&A on focus of call - topics, scope, areas of potential overlap/synergies with NGI calls
11:45 - 12:15	Q&A on applications, proposal evaluation and contracting - FAQ
12:15 - 12:30	Webinar wrap up – need for follow-up support, etc

# NGI\_TRUST in a snapshot

## Project partners



## Key facts & figures

- Duration: December 2018 - November 2021
- 3<sup>rd</sup> party funding: €5.6m
- Three rounds of open calls
- Aim is to:
  - engage a variety of players & not just “usual H2020 suspects”;
  - explore privacy & trust enhancing topics (defined with the support of an advisory board) critical to building a Human Centric Internet



## NGI\_TRUST objectives

1. Reinforce, structure and develop the community of researchers, innovators and technology developers in the field of privacy and trust enhancing technologies
2. Build on the state of the art in privacy and trust enhancing technologies by focusing support for third-party projects in a limited number of priority topics
3. Improve user trust and acceptance of emerging technologies by focusing on applications and solutions that develop a more open, robust and dependable Internet and strengthen Internet Governance
4. Foster the exploitation and commercialisation of the results of selected third-party projects through a tailored process of coaching and mentoring

# NGI\_TRUST funds third-party projects selected via open calls

Aim is to:

- Engage a variety of players (not just “usual H2020 suspects”),
- Explore privacy and trust enhancing topics identified with the support of an Advisory Board) critical to building a Human Centric Internet
- 3rd open calls aim to build on 1<sup>st</sup> and 2<sup>nd</sup> call projects (e.g. funding larger projects following on from feasibility type projects) but also attract additional players with scalable projects
- Duration of third-party projects: from 9 to 12 months, with some flexibility

# Three types of third-party projects

Type 1 (viability)	Type 2 (execution)	Type 3 (transition to commercialisation)
<p>Up to €75,000 per project from NGL_Trust, no matching funds required.</p> <p>The objective is to explore and assess the technical feasibility and/or commercial potential of a breakthrough innovation that aims at enhancing privacy and trust for the NGL. Activities can include conceptual development, risk assessment, market study or intellectual property management of a new technology or service, or a new application of existing technologies.</p> <p>Indicative duration: 6 months.</p>	<p>Type 2 (execution): up to €150,000 per project from NGL_Trust and matching funds of up to €75,000 (2/3 - 1/3 model).</p> <p>The objective is to fund R&amp;D or technology development projects underpinned by a strategic plan and feasibility assessment (which can be, but need not be, developed through a Type 1 project funded by NGL_Trust).</p> <p>Indicative duration: 6-9 months.</p>	<p>up to €200,000 per project from NGL_Trust and the equivalent in matching funds (50/50).</p> <p>These projects should pursue the commercialisation of a privacy and trust enhancing innovation for the NGL (which can be, but need not be, developed through a Type 2 project funded by NGL_Trust).</p> <p>Indicative duration: up to 12 months.</p>

Maximum award to any single third-party will be €200,000.

# Open call #1 statistics

- 109 proposals received of which Type 1: 81, Type 2: 26; Type 3: 2
- 177 Partners from 27 countries
- 18 projects funded for €2.112.772,67, additional funds mobilized: €750,403
- Coaching on-going with first projects nearing completion.

Country	# Applicants	% of total
France	32	18.1%
UK	22	12.4%
Germany	18	10.2%
Spain	15	8.5%
Netherlands	14	7.9%

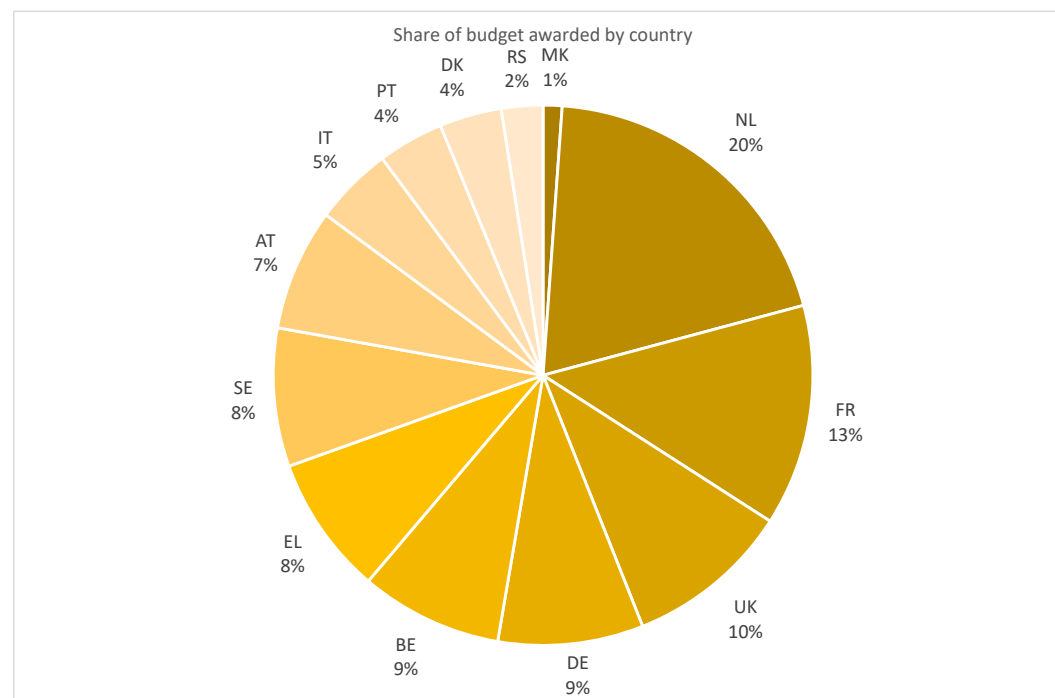
## Funding (total for 79 projects)

- Total budget: €15,311,092
- Total funding requested: €12.487.796

## 1<sup>st</sup> call awardees

Type of Third Party organisations	Number	% total
SMEs	13	48%
Higher Education (e.g. university)	7	26%
Other not-for-profit (NGO, foundation,...)	4	15%
Research organisation	2	7%
Natural person	1	4%
<b>Total</b>	<b>27</b>	<b>100%</b>

Number of projects awarded	18
Total budget allocated	€ 2,112,723
Total number of Third Parties	27
New to H2020 (per TP)	17





# 1st call themes: beyond passwords, better privacy, safer browsing and user control.

- We need to move **beyond passwords and** find a better way for users to manage the complexity of shared secrets and technical trust. 4 projects (**Keyn, COP-MODE, CryRev, and TCN** ) will work in this area, looking at how we can use our mobile devices more effectively as tokens instead of the need for passwords, how we can better protect data on our mobile devices, and how we can improve the way that cryptography is used on hardware and in the core of our internet infrastructure.
- It is essential to provide **better privacy**, particularly in areas where data is more sensitive and in how we present privacy information to our users. 4 projects (**b-smart, Edge-TINC, CAP-A and MyPCH**) will look at how we can both protect and utilise health data, how we deal with managing large amounts of data in the cloud and how we can better support users in understanding the legal issues around consenting to use services
- Safer browsing is essential to an **ecosystem of privacy and trust**. 3 projects (**CASPER, D4S, and ISIBUD**) will look at providing better informed safety for children online in a way that doesn't unnecessarily block access to useful information. How can VPN technology be improved to provide a better user experience and how the users needs can be supported more effectively in internet search rather than being driven by the wants of advertisers?
- To achieve a truly human-centric Internet, we need to have **user control**. The complexity and options when navigating a globally connected internet can be a daunting task. 6 projects (**Cozy Cloud, EUACTIVE, DECIDE, Protect Yourself, INSTANT, and Decentralised Messaging**) will focus on user control to ease the decision making and customisation of settings to give the user a role in their internet.

# Open call #2 statistics

- **79 proposals** received, of which
  - Type 1: 48
  - Type 2: 28
  - Type 3: 3
- **105 applicants** from 23 countries
- **53 out of 105 (50,5%) applicants** have not received Horizon 2020 funding before

Country	# Applicants	% of total
France	32	18.1%
UK	22	12.4%
Germany	18	10.2%
Spain	15	8.5%
Netherlands	14	7.9%

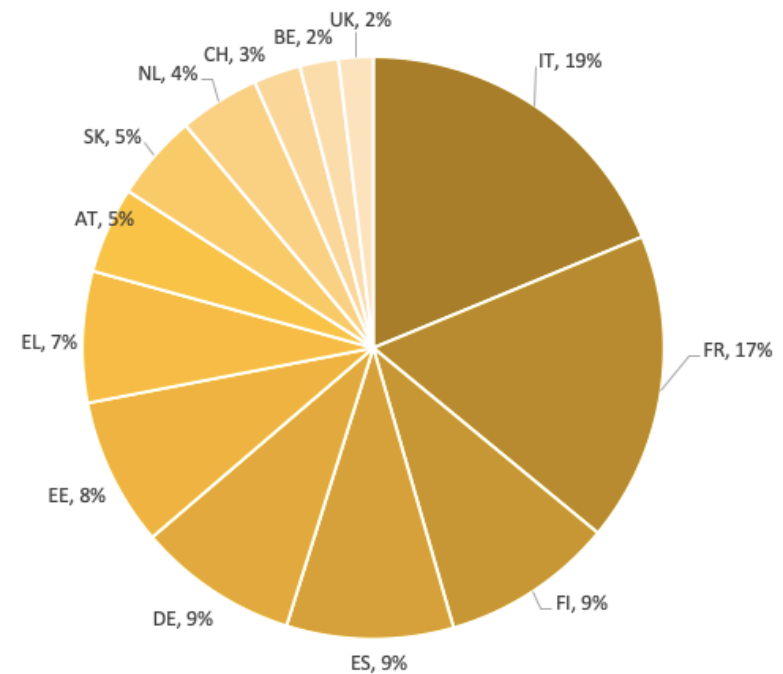
## Funding (total for 79 projects)

- Total budget: €15,311,092
- Total funding requested: €12.487.796

## 2<sup>nd</sup> call awardees

Number of projects awarded	19
Total budget allocated	1,581,672.67 €
Total number of Third Parties	28
New to H2020 (per TP)	8

Type of Third Party organisations	Number	% total
Natural person	7	7%
Non-profit association	4	4%
Other private company (large)	1	1%
Public research entity	4	4%
SME	65	62%
SME/start-up	5	5%
University	19	18%
<b>Total</b>		<b>100%</b>



## 3<sup>rd</sup> Open Call priority topics with indicative areas of concern (I)

1. Topics focused on App implementations to manage the plethora of Information Sharing Agreements and consents that a person would agree to, manage and re-use over time (Type 2 or Type 3 proposals only)

- Solutions enabling users to get trust on privacy terms
- Solutions enabling users to more easily and uniformly set preferences or terms such as machine-readable privacy terms (IEEE - P7012) and technologies that help to reduce the risk that GDPR is misused to further exploit/ complicate the user experience.
- Efficient techniques to anonymize personal data in the era of Big Data

## 3<sup>rd</sup> Open Call priority topics with indicative areas of concern (II)

2. Technical innovation in privacy enhancing technologies, such as cryptography, federated identity, security and privacy for IoT, privacyenhancing data transports and data at rest

- Simplified multifactor authentication
- Option for encrypted devices/data at rest. i.e. an option for the user to prevent being forced to decrypt their data under, such as physical threat.
- Cybersecurity certification for ICT products, processes and services (EU Cybersecurity Act).
- Solutions that improve algorithm agility (where deployed algorithms are superseded and must be replaced).
- Improved information for users about the security mechanisms in use by apps (browsers give the user some clues about e.g. TLS; apps give none).
- ...

## 3<sup>rd</sup> Open Call priority topics with indicative areas of concern (III)

3. The application of artificial intelligence/machine learning/neural networks to serve the user's interests
- User-centric design, simplicity, usability, edge AI ('artificial intelligence')
  - Taking into account the recommendations of the EU High Level Expert Group on AI, a scientific and empirical approach is needed, such as developing guidance on how to approach access and acquisition of data for the development/expansion of AI, operationalize those recommendations in order to strengthen the capacity/ability of the Internet industry in Europe.
  - Explainable artificial intelligence (XAI) for improving human trust in artificial intelligence (AI) systems
  - Quantum resistant computing

## 3<sup>rd</sup> Open Call priority topics with indicative areas of concern (IV)

4. Bootstrapping trust at the protocol level, to maintain a trustable Internet Infrastructure.

- DNS-based security of the Internet Infrastructure (DNSSEC, DOH approach), given the need to reinforce trust in a world of “deep fake”

## 3<sup>rd</sup> Open call process and timing

- 28 February 2020: open call launched
- 4 May 2020: deadline for submission of applications
- May 2020: eligibility check and evaluations of proposals
- June 2020: Meeting of evaluation panel and of NGI\_Trust Management board to agree on selected projects.
- Submission of the list of selected projects to European Commission for final approval.
- June 2020: contracting and signature of approved third-party grants.
- July 2020 – onward: project implementation.

**Projects will receive coaching from technical experts during their implementation and follow-up support on IPR and business mentoring to help implement their solutions.**





## More information/contact us

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- 3rd Open Call: [https://wiki.geant.org/display/NGITrust/3rd+Open+Call+NGI\\_TRUST](https://wiki.geant.org/display/NGITrust/3rd+Open+Call+NGI_TRUST)
- NGI.eu website : [https://www.ngi.eu/opencalls/ngi\\_trust-open-call/](https://www.ngi.eu/opencalls/ngi_trust-open-call/)



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