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

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NGI_TRUST in a snapshot

Project partners

EFIS

Fraunhofer IAO

GÉANT Networks • Services • People

tecnalia Inspiring Business

ebn innovation network

kantara INITIATIVE EUROPE

Key facts & figures

- Duration: December 2018- November 2021
- 3rd 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

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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

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Three types of third-party projects

Type 1 (viability)	Type 2 (execution)	Type 3 (transition to commercialisation)
Up to €75,000 per project from NGI_Trust, no matching funds required. 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 NGI. 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. Indicative duration: 6 months.	Type 2 (execution): up to €150,000 per project from NGI_Trust and matching funds of up to €75,000 (2/3 - 1/3 model). The objective is to fund R&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 NGI_Trust). Indicative duration: 6-9 months.	up to €200,000 per project from NGI_Trust and the equivalent in matching funds (50/50). These projects should pursue the commercialisation of a privacy and trust enhancing innovation for the NGI (which can be, but need not be, developed through a Type 2 project funded by NGI_Trust). Indicative duration: up to 12 months.

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

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Schedule for the open calls

1st open call

- Open Call period: 1 February 2019- 30 April 2019
- Evaluation panel selected project by mid-June
- 18 third-party projects selected and launched from July 2019

2nd open call

- **Launched : 1 October 2019**
- **Deadline for proposals : 1 December 2019**
- Contracting and launching of projects: February 2020

3rd open call

- Launched: 1 February 2020
- Deadline for proposals : 1 April 2020
- Contracting and launch of projects: July 2020

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1st call – key figures

109 proposals received, of which

- Type 1: 81
- Type 2: 26
- Type 3: 2

177 Partners from 27 countries

68 out of 109 (62%) lead partners have not received Horizon 2020 funding before (information to be verified).

Country	# partners	% 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 109 projects)
Total budget : € 15,311,092
Total funding requested : €12,487,796

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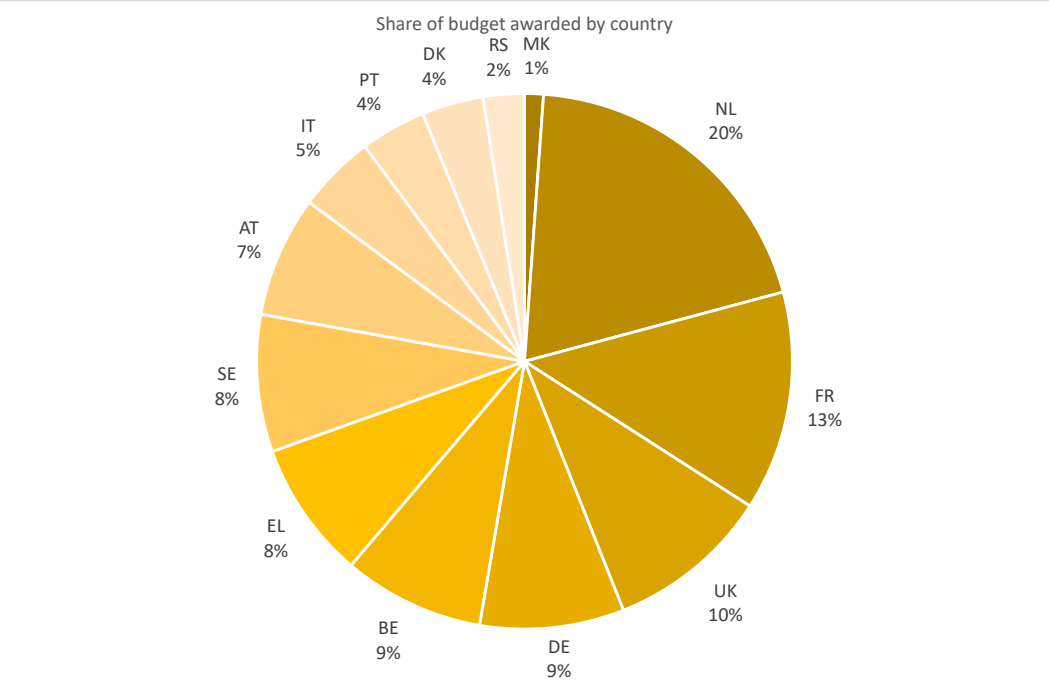
1st call awardees

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

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%
Total	**27**	**100%**



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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 that doesn't block access unnecessarily to useful information, how we can improve VPN technology to provide a better user experience and how we can support the users needs 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.

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2nd Open Call priority topics

- Better management of consent, to give more control to the user of their data when accessing and using services.
- Technical innovation in privacy enhancing technologies, such as cryptography, federated identity, security and privacy for IoT, privacy-enhancing data transports and data at rest.
- The application of artificial intelligence/machine learning/neural networks to serve the user's interests.
- Bootstrapping trust at the protocol level, to maintain a trustable Internet Infrastructure.

See 2nd open call here https://wiki.geant.org/display/NGITrust/2nd+Open+Call+NGI_TRUST

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Indicative areas of concern that could be addressed by proposals for the **2nd open call**

- With a view to next generation certificates, how can European grid certificate authorities build up user-friendly mechanisms that promote a changed user experience and awareness and addresses forms of identity that comply with EU law and or meet specific European needs.
- DNS-based security of the Internet Infrastructure (DNSSEC, DOH approach), given the need to reinforce trust in a world of “deep fake”.
- Quantum-resistant cryptography and methods towards mitigating quantum computing attacks.
- Reinforcing reputation systems and thereby enhance the potential to measure the value of personal data and transparency while respecting GDPR principles.
- Pilot implementation of specifications, standards, acceptance criteria and measurement frameworks for new identifiers, for instance:
  - Mobile Driving Licenses;
  - Delegation in the context of ID;
  - eID & authentication services to support, for instance student mobility and access to educational services, thin file individuals, disabled users, refugees, non-digital natives, lost identities due to natural disasters etc.
- Solutions enabling users to more easily & 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.
- Services and technologies that enhance transparency, user intervenability & accountability in data processing.

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2nd Open call process and timing

- 1 October 2019: open call launched
- 1 December 2019 : deadline for submission of applications
- December 2019 : eligibility check and individual evaluations of proposals
- January 2020 : Meeting of evaluation panel and of NGI_Trust Management board to approve list of selected projects.
- Submission of the list of selected projects to European Commission for final approval.
- February 2020 : contracting and signature of approved third-party grants.
- March 2020 – onwards : projects implemented.

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

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More information/contact us

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- NGI_TRUST wiki : https://wiki.geant.org/display/NGITrust
- 2nd Open Call: https://wiki.geant.org/display/NGITrust/2nd+Open+Call+NGI_TRUST
- NGI.eu website : https://www.ngi.eu/opencalls/ngi_trust-open-call/

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