Privacy and trust: trends in experiments in EU-US research and innovation

NGI Policy Summit 2020

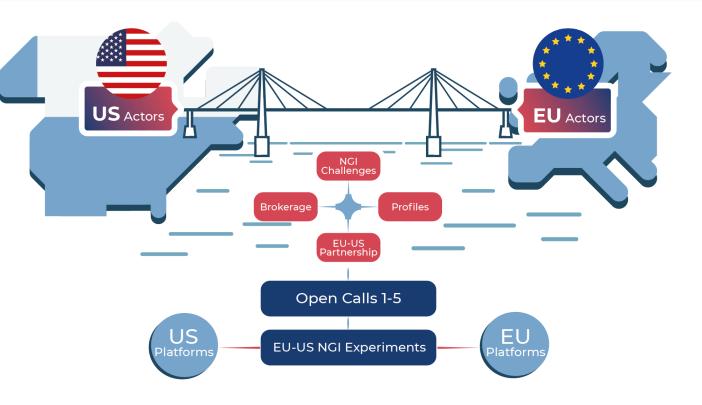
Jim Clarke, Waterford Institute of Technology, Ireland, NGIatlantic.eu project coordinator, <u>jclarke@tssg.org</u> Sara Pittonet Gaiarin – Senior Project Manager, Trust-IT, <u>s.pittonet@trust-itservices.com</u>

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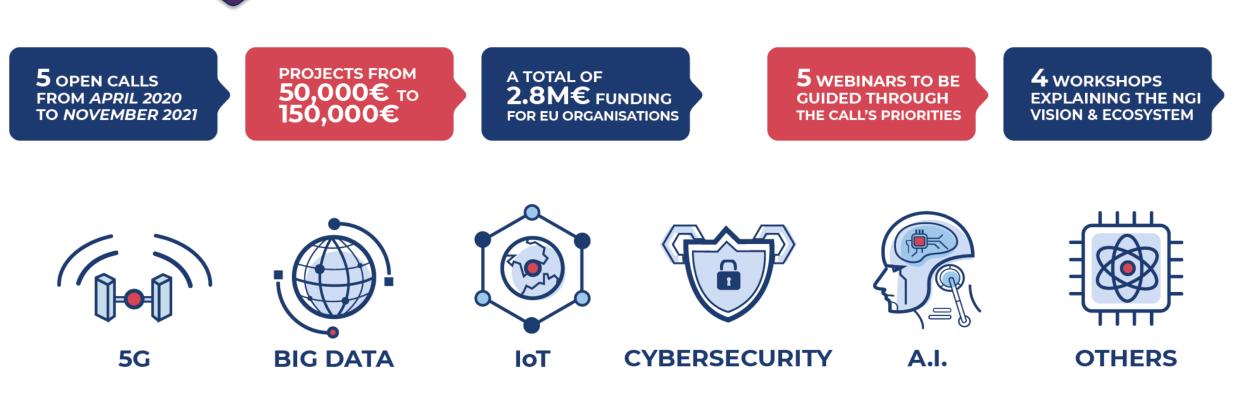
NGIatlantic.eu: bridging EU-US research on NGI

From January 2020 through June 2022, NGIatlantic.eu will fund EU-based researchers and innovators in carrying out **Next Generation Internet related experiments**, in collaboration with **US research teams**.





NGIatlantic.eu: bridging EU-US research on NGI





NGlatlantic.eu 1st OPEN CALL

Do you want your EU-US NGI experiment to be eligible for NGIatlantic.eu funding?

Apply Before 29th of May 2020

"Destroying rain forest for economic gain is like burning a Renaissance painting to cook a meal"

- E. O. Wilson -

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NG ATLANTIC.EU

NGlatlantic.eu 1st Open Call - Who applied?

Bridging EU-US research on NEXT GENERATION INTERNET

EU - US Proposers

19 Research & Academia

- **19** SMEs
- **5** NGOs



Average Project Funding Requested ~€ 130.000

Proposals Received

Applicants From 14 Countries Involved

21 US Organisations Participating

NGIatlantic.eu 1st Open Call – the winners



6 projects have been selected to to carry out research & innovation activities in collaboration with US counterparts on NGI experimental platforms > total funding budget of € 726,488

TLANTIC.EU

Self-Certifying Names for Named Data Networking

«Using our naming scheme, content names become decentralized, ownerindependent, and self-certifying, in the sense that a user can verify the authenticity and the integrity of a content item, by relying only on the content name and the content item itself, removing the need for trust anchors, or any other middlemen.»

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Athens University of Economics and Business with The University of Memphis



Food Data Marketplace - Privacy and Trust Enabling Data Marketplace for Sustainable Supply Chains

«Food Data Market (FDM) is an inclusive marketplace fostering new economic models for sustainable food supply chains based on data. It leverages key benefits of DLT (trust, neutrality, inclusiveness) while keeping the key advantages of participants intact by employing privacy-by-design approach thus enabling farmers and cooperatives to regain control of their data, give it a price tag, and sell it to interested partners in the supply chain»

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Trace Labs with Kakaxi Inc.



CacheCash Experiment

«CacheCash, the Content Delivery Network (CDN) technology, has the potential to change the nature of CDNs by involving the end users themselves directly in serving content through machines that are under their control. Putting users in charge can lead to a wider range of content benefitting from CDNs. CacheCash provides a service in which interested users run caches, and they are incentivised to participate by receiving a crypto-currency (Cachecoin) in exchange for serving content to other users»

Sorbonne Université with NYU Tandon School and US Ignite



The story behind EU-US collaboration in NGI

Jim Clarke – jclarke@tssg.org – Waterford Institute of Technology, NGIatlantic.eu Coordinator

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The story behind EU-US collaboration in NGI - timeline

- 2013-2014: Series of EU US workshops jointly organized by the GENI and Fed4FIRE teams, with their sponsors US NSF and DG CNECT;
- 2014: Specific call under Work Programme ICT-11-2014 FIRE+ (Future Internet Research & Experimentation) on international collaboration CSA (EU US a main focus);
- 2015 2016: Series of GENI/FIRE collaboration workshops. Led to US testbeds asked to join Open Calls of FIRE projects either for experiments or for linking facilities, where each side would fund its own part and GEANT would provide the link.
- 2017: DG CNECT and NSF established a joint EU-US committee bringing together researchers from both sides of the Atlantic.
 - Discuss the joint development of research-focused networking testbeds and identify joint research opportunities.
 - Organised as two subcommittees, focusing on two broad areas: "Next Generation Internet (NGI)" and "Advanced Wireless Platforms".
 - Two-day workshop at the DG CNECT premises in Brussels on 26-27th June, 2017. The workshop was co-located with the "Net Futures Conference 2017", which included an "EU-US session on Next Generation Internet" on 28th June, 2017.
- 27 October, 2017, ICT-31-2018 2019 EU-US collaboration on NGI published https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ict-31-2018-2019
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ICT-31-2018-2019 (EU-US) and ICE-T (US-EU)

- ICT-31-2018, resulted in two Coordination and Support Action (CSA) projects: THINK NEXUS (EU-US Think-Tank on NGI), and NGI EXPLORERS (EU-US Fellowships) in topics related to NGI.
- ICT-31-2019 call, resulted in NGIatlantic.eu to catapult the earlier international cooperation activities between the EU and US in experimental platforms
- In 2018, the USF NSF funded a dedicated US EU collaboration programme entitled Internet Core & Edge Technologies (ICE-T) Program Awards for US investigators to carry out collaborative research with EU investigators on Internet technologies and Advanced Wireless Networking (AWN).
- In 2018, the ICE-T call has resulted in the funding of 2.800.000 US dollars for eight (8) Research Collaborations (RC) projects (3 years duration at 300k dollars funding for each project) and five (5) Research Collaboration Initiation (RI) projects (1 year duration and 100k dollars funding for each project).
- EC are in discussions with the US NSF on a follow up ICE-T programme.
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About NGIatlantic.eu

Jim Clarke – jclarke@tssg.org

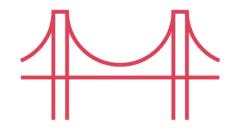
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NGIatlantic.eu key features







The External Advisory Group (EAG) The External Pool of Evaluators (EPE)

The Twinning Lab



5 Open Calls - Call#1: April 2020 14 28/09/2020



2.8 Million Euros funding

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NGI Experiments to be funded





Prepare and submit your project addressing the call's priorities Content-rich sessions to learn the full background and criteria of our open calls

CONTINUOUS COACHING AND MENTORING

> From pre-proposal to exploitation to maximise your project's success

NGlatlantic.eu Open Calls



Cascade funding to EU-based researchers and innovators in carrying out NGI related experiments with US research teams in Privacy and Trust enhancing technologies, **Decentralised data governance**, **Discovery and identification** technologies, and others

✓ 5 Open Calls for Proposals, with a total 2.8 Million Euros budget ✓ funding range from 50.000€ to 150.000€ ✓ Long-term & shortterm experiments, with R&I activities lasting up to 3 or 6 months





Open Call for External Evaluators

NGIatlantic.eu aims to set up an External Pool of Evaluators (EPE) of 50+ members to support the review process of the proposals received from the various Open Calls

Strong expertise in NGI topics of the NGIatlantic.eu Open Calls Active involvement in NGI-related efforts over the past 12-18 months; Active engagement in NGI events is a plus EU 27, 16 Associated countries and USA Continuous call

APPLY TO BECOME AN EXTERNAL EVALUATOR

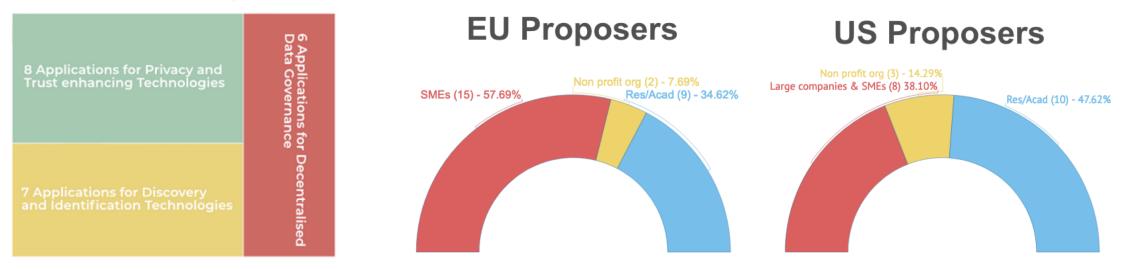
ngiatlantic.eu/evaluators



NGIatlantic.eu 1st Open Call - insights

Topics Coverage

With 30% crossover within the topics



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NGlatlantic.eu 2nd Open Call

NGlatlantic.eu 2nd Open Call

NOW OPEN!

Apply before 30 September 2020 17 CET

Jim Clarke – jclarke@tssg.org

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2nd Open call details

- Duration: 1st August 30th September 2020 at 17:00 CET. Evaluation and notification will take place in October 2020;
- Indicative expected Start dates of projects: 1st January 2021;
- O Two types of proposals can be funded under the NGIatlantic.eu Open Calls, as shown below.

Proposal type	Description		Monitoring frequency	Funding range*
LT – Long term contributions	EU-US NGI experiment project with R&I activities	6 months	Monthly	€50,000 - €150,000
ST – Short-Term contributions	EU-US NGI experiment project with R&I activities.	3 months	Fortnightly	€25,000 - €75,000



Experimental platforms

The NGIatlantic.eu Open calls are open to all EU or US experimental platforms: **FED4FIRE+** and **5G-PPP**, US - NSF's Wired and Wireless funded programs, such as **ENTER / GENI, FABRIC**, and Future Cloud Platform, Platforms for Advanced Wireless Research (**PAWR**), US Ignite, and dedicated US-EU Internet Core & Edge (**ICE-T**) programmes, among others.





2nd Open call details: 2 priorities #1

a. EU – US Experimental Platforms interconnection:

this topic invites established designers and facility providers of experimental infrastructures, testbeds, and platforms enabling experimentation in the NGI areas on both sides of the Atlantic to interconnect with each other, to offer their facilities on a continuous basis to its community of experimenters and application developers in other NGI topics.



2nd Open call details: 2 priorities #2

b) NGI Priority topics where results are already available for experimentation on EU – US platforms in areas related to:

- **OPrivacy and Trust enhancing technologies**
- **ODecentralized data governance**
- **ODiscovery and identification technologies.**





The Twinning Lab



Need help in finding partners?

A space for researchers, innovators and start-ups from EU and US to **discover and connect with transatlantic actors and establish complementary partnerships.**

JOIN THE TWINNING LAB NOW

ngiatlantic.eu/twinning-lab

JOIN THE TWINNING LAB!

- Showcase your expertise in addressing NGI
 - challenges
- Find the ideal partner for your EU-US NGI experiment



Self-Certifying Names for Named Data Networking

George C. Polyzos, Director, Mobile Multimedia Laboratory, Athens University of Economics and Business

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Food Data Marketplace -Privacy and Trust Enabling Data Marketplace for Sustainable Supply Chains

Tomaz Levak, Managing Director at Trace Labs Ltd

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Pushing the trust boundaries of content distribution networks. The CacheCash Experiment

Berat Senel, Research Engineer at PlanetLab Europe, EdgeNet, Laboratoire d'Informatique de Paris 6 (LIP6)

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Upcoming calls

Open call	Opening Date	Closing Date	Proposal Type	Duration
Open Call #3	01/12/2020	31/03/2020	LT ST	Max 6 months Max 3 months
Open Call #4	03/05/2020	30/06/2020	LT ST	Max 6 months Max 3 months
Open Call #5	01/09/2020	29/10/2021	LT ST	Max 6 months Max 3 months

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Thank you! Any questions?

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NEWSLETTER

ngiatlantic.eu/contact-us



WHY THE WHALE? All our calls are branded to raise awarness about environment protection. For more information visit: **ngiatlantic.eu/about-our-themes**

