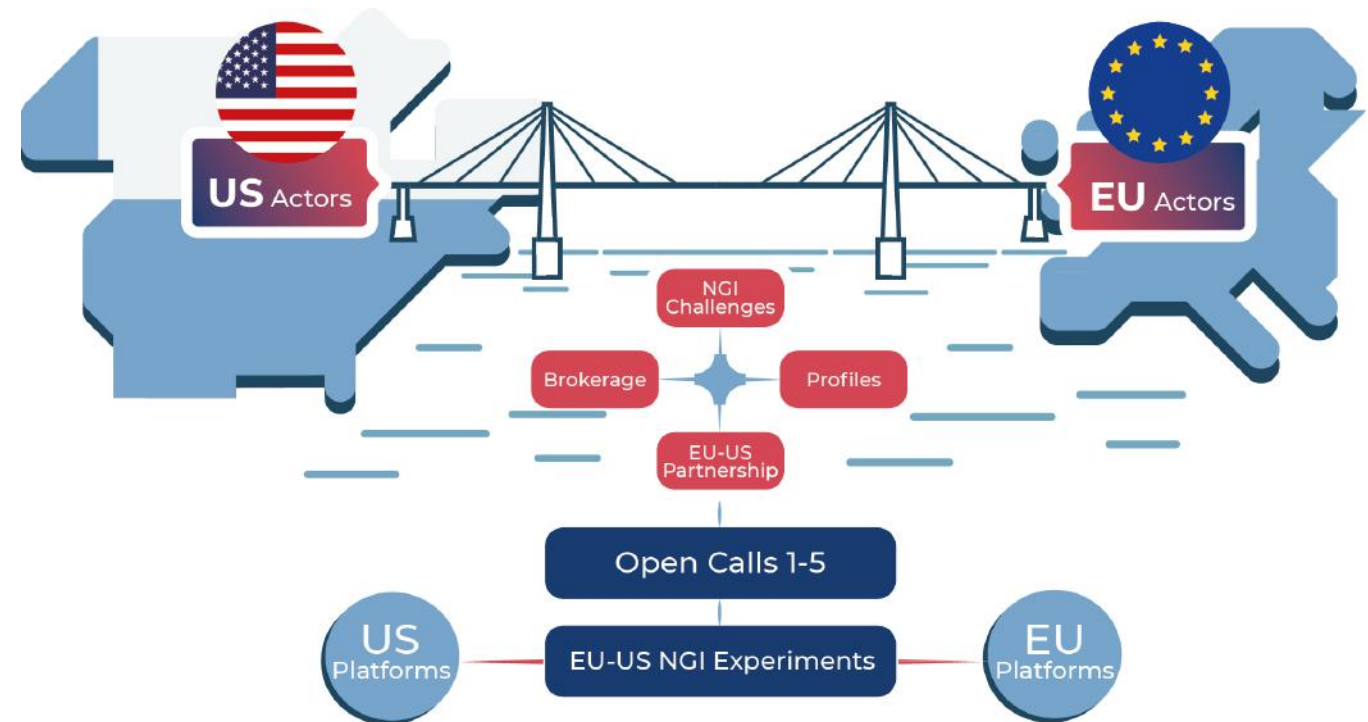


NGIatlantic.eu: bridging EU-US research on NGI

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



<https://ngiatlantic.eu/>



Statistics in a nutshell

Core objective: Attract and enable start-ups and innovators from EU and US to collaborate together on experimental platforms through Open call cascade funded projects related to the NGI topics.

- OC1: 21 EU – US teams applied with € 2,876,485 requested; 6 projects approved with budget of € 748,976. (**Ratio – 1 : 3,5**)
- OC2: 23 EU – US teams applied with € 2,877,190 requested; 5 projects approved with budget of € 634,483. (**Ratio – 1 : 4,6**)
- OC3: 33 EU – US teams applied with € 3,319,308 requested; 8 projects approved with budget of € 662,199. (**Ratio – 1 : 4,1**)
- Note: from OC 3 onwards, the NSF have a Dear Colleague Letter (DCL) Supp. Fund for funding US participation).

Applications statistics OC1 + OC2 + OC3

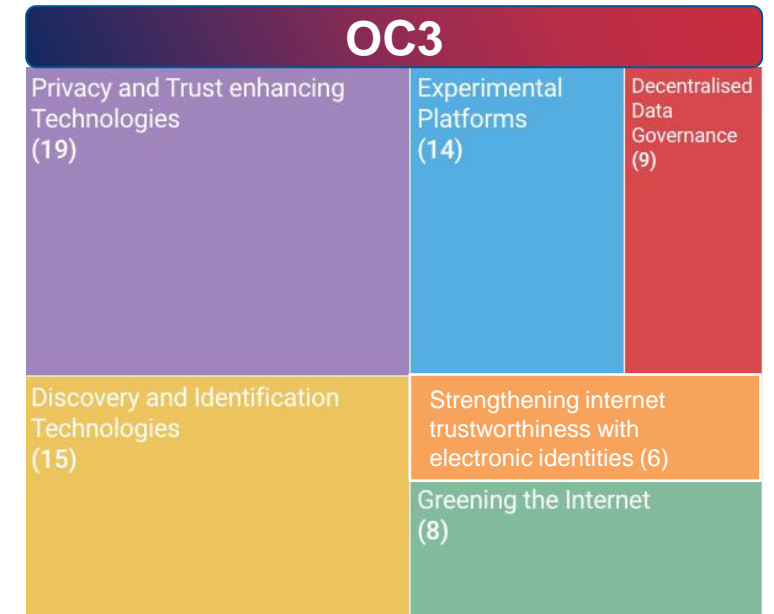
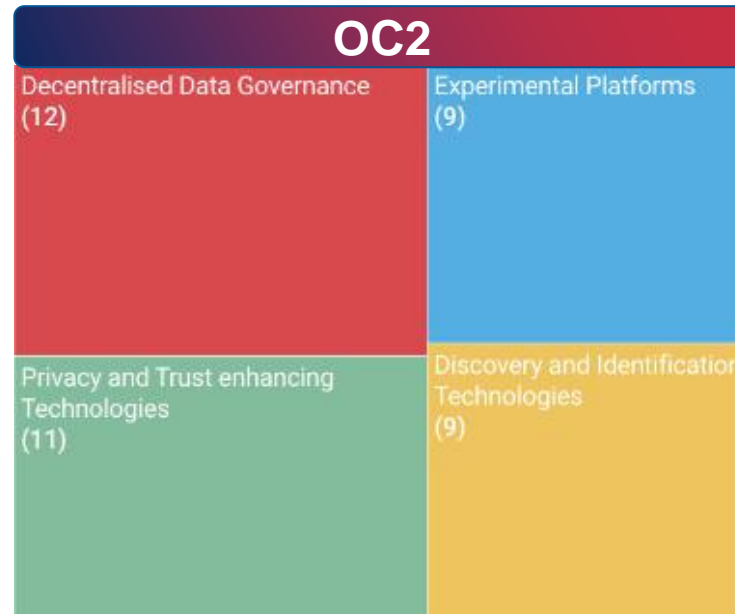
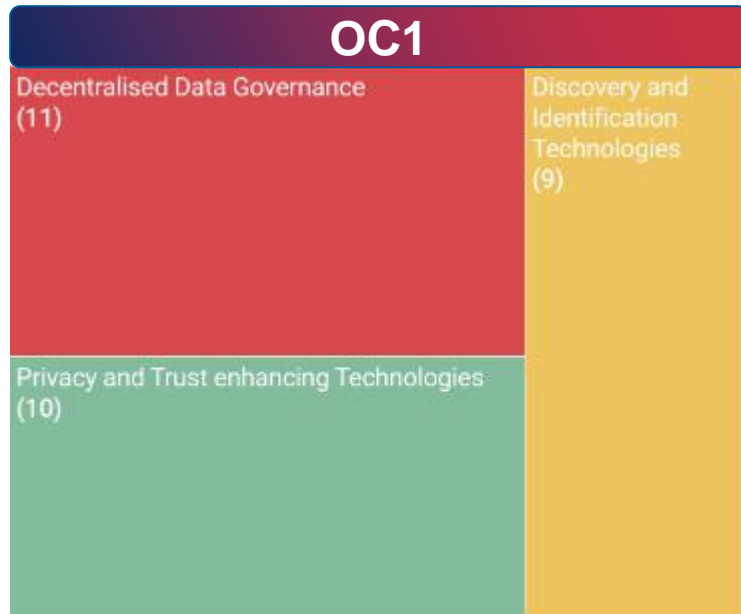
Total number of applications received	77
Total budget requested	€9,072,983.38
Total number of third parties - EU	98
Total number of third parties - USA	85
Total number of Third Parties - EU + US	183

Award statistics OC1 + OC2 + OC3

Total number of projects awarded	20
Total budget allocated	€2,045,657.93
Total number of TPs - EU	25
Total number of TPs - US	26
Total number of TPs - EU + US	51

Strategy on open call topics

TOPICS COVERAGE FOR OPEN CALL 1,2 AND 3



Important – focus of EU – US projects is **experimentation of results** in the NGI topics, and not Research & Innovation

Strategy on open call topics

- OC4
 - NSF involved in a number of workshops to discuss and agree new topics of mutual interest
 - Survey with other NGI projects was organized as well
 - 3 new topics added to OC4:
 - **Service and data portability, Open Internet architecture renovation** - from NGI RIAs, and
 - **Internet data sharing and interoperable services** - added by NSF to match their programs
 - Also including topics introduced in OC-2 and OC-3:
 - Experimental platform interconnection,
 - Strengthening trustworthiness and resilience of internet, and
 - Greening the Internet: a Sustainable and Climate-friendly NGI.
- After each OC, we monitor and reflect upon the OC topics and this factors into our decisions for the next OC.

NGIatlantic.eu fourth open call for proposals

Call information

- Open from 15 June – 15 September 2021
- Information available at <https://ngiatlantic.eu/ngiatlanticeu-4th-open-call>
- NSF DCL available <https://www.nsf.gov/pubs/2021/nsf21048/nsf21048.jsp>
- OC4 / OC5 workshop at <https://www.youtube.com/watch?v=m11sVzt6MeQ>

This NGIAtlantic.eu open call targets the following types of proposal submissions:

- Category a: EU-US experimental platforms interconnection
- Category b: Experiments with key enabling technologies in 5 NGI topics (1, 2, 3, 4, 5)

The call foresees one type of proposal:

- Short term (ST): estimated 3 - 6 months duration; Funding €25,000 - €75,000 resulting in 8-12 projects being funded with total budget of €600,000.

5 – NGI Open Calls: Q&A Session - 12.07.2021

NGI topics for experimentation of results:



1. Open Internet architecture renovation



2. Service and data portability



3. Internet data sharing and interoperable services

4. Strengthening internet trustworthiness with electronic identities

5. Greening the Internet: a Sustainable and Climate-friendly NGI



Category a. EU – US Experimental Platforms interconnection

- **This topic is for the twinning of EU and US 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 any NGI related topics**
- **It would be expected that the facilities could be used for experimentation of NGI projects (present and future).**

Category b.1. Open Internet architecture renovation

- **This topic this topic will focus on experiments supporting communities of developers in ensuring Internet architecture evolution towards better efficiency, scalability, security and resilience.**
- **Auditing, testing and improving protocols and open-source software and hardware that are used to manage the Internet, with renewed design goals such as isolation of contingencies, redundancy and self-repair, disruption tolerance, transparency, better real-time behaviour and energy efficiency.**
- **Ability to roll-out at Internet scale should be assessed as part of the proposed solutions.**

Category b.2. Strengthening trustworthiness and resilience of the internet

- **This topic will focus on experimentation of results on the NGI call topics related to increasing trustworthiness and resilience of the internet.**

Category b.3. Service and data portability

- **This topic will focus on the challenge of personal data portability on the internet as foreseen under the General Data Protection Regulation and the data porting and service provider switching as foreseen in the proposed free flow of non-personal data regulation.**

Category b.4. Greening the Internet: a Sustainable and Climate-friendly NGI

Report: INTERNET OF WASTE

- 5-9% of global electricity supply
- 2% of global climate emissions
- Effects from mining and waste
- Rising quickly with more pervasive connectivity (such as IoT)

NGI FORWARD

September 2020



As background, the NGI Forward project has identified a Sustainable and Climate-friendly Internet as one of eight key NGI topics that will set out a vision for a better, more human-centric future internet and inform the initiative's policy and technology research agenda going forward. For information, please look at [Internet of Waste](#) and [Breaking the 2 year cycle](#).

- This topic will focus on EU – US experiments of results related to use case implementations of innovative internet technologies and transparency mechanisms on EU – US experimental platforms shown to:
 - fight against the climate change with significant improvement of energy efficiency,
 - carry out measurements to create awareness of environmental impact of the Internet, and
 - promotion of technologies that help reduce the energy consumption and carbon emission.
- Welcome EU – US applicants that can provide and experiment with transparency mechanisms and sustainability metrics on the environmental cost of the Internet.

Category b.5. Internet data sharing and interoperable services

- **This topic will address the challenge of sharing network data siloed in different internet regions across geographic boundaries and enabling trusted Internet services by composition and orchestration of globally distributed services. It will address:**
 - **Secure and privacy-preserving data sharing, which is particularly important to address the rising cyber threats and incidents.**
 - **Sharing of Internet data to support continuous monitoring and data-driven analysis is critical to identify impending/ongoing attacks, support traceback and attributions, and intelligently respond to Internet events.**
 - **Experiments related to such cross-domain data sharing challenges to enable cyber threat identification, risk assessment and incident management, and enabling secure and interoperable internet services are of particular interest.**
- **Note: in contrast with service and data portability topic, this relates to the role of data sharing for the purposes of cybersecurity, rather than for services / applications.**

How are US partners funded? A new dedicated fund for NGLatlantic.eu for those with an existing NSF grant (1/2)

NEW

- A new NSF program has been launched in February 2021 as a *Dear Colleague Letter* for existing grant holders
 - NSF US-EU DCL 21-048 – a new dedicated supplemental fund for existing US NSF grantees to team up with NGLatlantic.eu partners, if they are in successful NGLatlantic.eu applications.
 - Open to active NSF-funded researchers within NSF's Computer and Network Systems Core and Secure and Trustworthy Cyberspace programs;
 - Funding available for NSF grantee of up to \$100,000 or 20% of original grant budget for max duration of one year (**n.b.** the duration must fall within the period of their existing NSF grant period);
 - Proposers still have to explain how their US partners will fund their activities (independently from the DCL) and the proposals will be evaluated and selected based only on this information. US partners have to commit to their work even if they finally do not receive their funding through the DLC;
 - All supplemental funding requests subject to NSF's merit review process (more details on next slide);

How are US partners funded? A new dedicated fund for NGLatlantic.eu for those with an existing NSF grant (2/2)

NEW

○ A new DCL (continued)

- **IMPORTANT: No difference will be done in the evaluation process between proposals with NSF funded partners and the others. All proposals will have equal opportunities and will be selected based exclusively on their merits;**
- The deadline for submission of supplemental funding requests for consideration is **within a week of any NGLatlantic.eu open call deadline**. For OC3, it must be submitted to NSF by **5th March, 2021!**
Supplement fund request to include:
 - Summary of the active research award, including original research vision, goals, activities, and accomplishments, spanning Intellectual Merit and Broader Impacts, and how this award is related to the proposed work for the NGLatlantic.eu open call (about a page);
 - The project description that was submitted to the NGLatlantic.eu open call;
 - Bio-sketch of the EU lead partner (one page); and
 - Justification of the need for the supplemental funds request.
- See <https://www.nsf.gov/pubs/2021/nsf21048/nsf21048.jsp> for further information and NSF contact points.



If DCL doesn't match requirements, some other possibilities (1/2)

- US partners can use own NSF project funds, if they have (or desire) an international EU connection;
- Some examples of NSF programs underway with large scale platform projects in the following areas:
 - NSFCLOUD: CHAMELEON <https://www.chameleoncloud.org/> and CloudLab <http://www.cloudlab.us>
 - NSF Network Inf.: FABRIC - <https://fabric-testbed.net/events/fabric-experimenters-workshop-2021> - suggest you register to their upcoming Experimenters workshop, 8-9 April, 2021.
 - NSR PAWR: COSMOS - <https://COSMOS-lab.org/>), POWDER-RENEW <https://POWDERWireless.net/>, and AERPAW <https://AERPAW.org/>
 - NSF Platforms for Advanced Wireless Research (PAWR) supplemental fund available to US based academics, and what they call 'active NSF-funded wireless researchers' for receiving connection and support to the 3 PAWR platforms, COSMOS (<https://COSMOS-lab.org/>), POWDER-RENEW (<https://POWDERWireless.net/>), and AERPAW (<https://AERPAW.org/>). Note: while not specifically designated for international connections, there could be some scope to utilise this fund for teaming with an EU partner. See <https://www.nsf.gov/pubs/2020/nsf20046/nsf20046.jsp>

If DCL doesn't match requirements, some other possibilities (2/2)

- Some examples of NSF programs underway with large scale platform projects (continued):
 - International Research and education Network Connections (IRNC) – <https://www.nsf.gov/pubs/2020/nsf20535/nsf20535.htm> and results at https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503382&org=NSF;
 - A number of these IRNC projects have objectives related to collaboration with international, including EU partners. Some of these have been listed in our [Twinning Lab](#).
 - ICE-T program – US-EU Internet Core & Edge Technologies (ICE-T) <https://www.nsf.gov/awardsearch/advancedSearchResult?ProgEleCode=7363&BooleanElement=Any&BooleanRef=Any&ActiveAwards=true#results> Many of the RC projects (3 year duration projects) may be finishing but we understand that some may still have some funds remaining and could be looking for EU partners.

Frequently Asked Questions

Please visit <https://www.ngiatlantic.eu/faq> for many more questions and answers.

If you still have questions, please send it to us at contact@ngiatlantic.eu and we will answer and if there is still time, we can have a one to one coaching call with you to answer the queries.

Thank you!

James.Clarke@waltoninstitute.ie

- Call 4 Information available at <https://ngiatlantic.eu/ngiatlanticeu-4th-open-call>



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NEWSLETTER

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