NGlatlantic.eu 4th Open call – all you need to know

17th February 2021, 16:00 CET

Slides presented by:

Jim Clarke, Waterford Institute of Technology, NGIatlantic.eu (iclarke@tssg.org) Ruben Tognetti, Digital Strategist, Trust-IT, NGIatlantic.eu (s.pittonet@trust-itservices.com)



Agenda

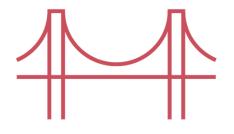
16:00 - 16:05	Welcome from Jim Clarke, Waterford Institute of Technology, NGIatlantic.eu project coordinator
16:05 - 16:15	NGIatlantic.eu 4th Open Call application process - Ruben Tognetti, Trust-IT Services
16:15 - 16:30	NGIatlantic.eu 4th Open Call topics and US partner funding opportunities - Jim Clarke, Waterford Institute of Technology, NGIatlantic.eu project coordinator
16:30 - 16:45	Applicants contributions, Open Floor for Questions & Answers
16:45 - 17:00	FAQ & Lessons learnt from previous Open Calls - Jim Clarke, Waterford Institute of Technology, NGIatlantic.eu project coordinator
17:00	Close



NGlatlantic.eu key features







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

The Twinning Lab







2.8 Million Euros funding



NGI Experiments to be funded



APPLY WITH YOUR TEAM

Prepare and submit your project addressing the call's priorities



WEBINARS & WORKSHOP

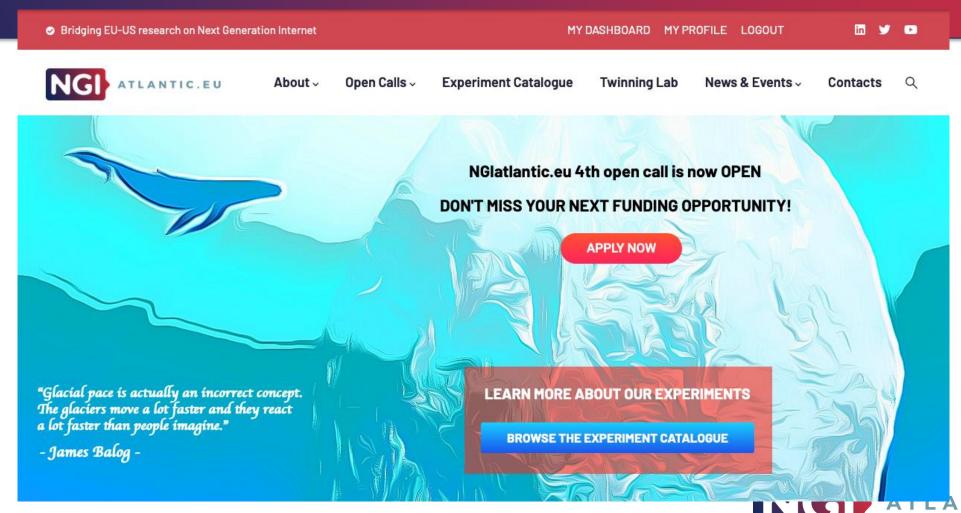
Content-rich
sessions to learn
the full background
and criteria of our
open calls

CONTINUOUS COACHING AND MENTORING

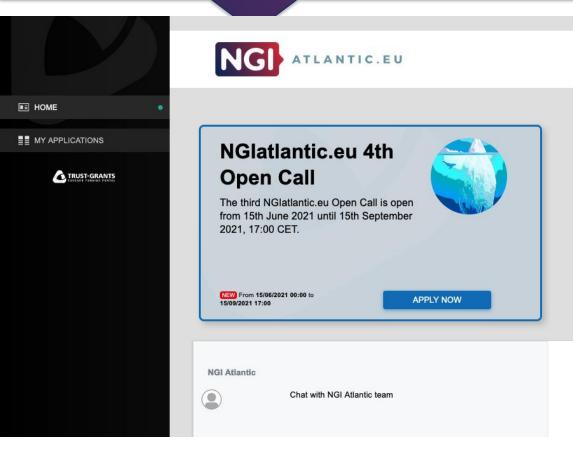
From pre-proposal to exploitation to maximise your project's success

3 – Webinar - 28.07.2021

OUR WEBSITE: NGlatlantic.eu



The Dashboard





Welcome test

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



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 + 0	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

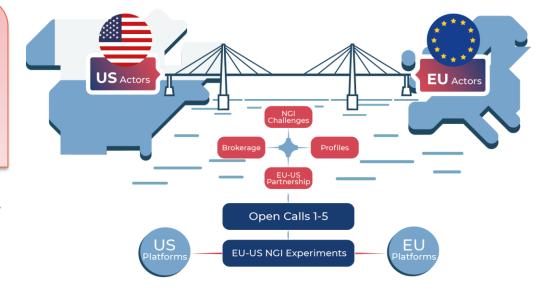
Award statistics OC1 + OC2 + OC3			
Total number of projects awarded	20		
Total budget allocated	€2,045,657.93		
Total number of TPs - EU	25		
Total number of TPs - US	26		
Total number of TPs - EU + US	51		



NGlatlantic.eu: bridging EU-US research on NGI

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

- 5 Open Calls for Proposals, with a total € 2.8 Million Euros budget for EU participants;
- Projects funding range from € 25.000 to € 75.000, from 3 (minimum) months or 6 months (maximum);
- O An External Pool of Evaluators (EPE) of 50+ members to support the review process continuous open call;
- 3/5 open calls completed 4th call open until 15/09/21





NGIatlantic.eu 4th Open Call details & call topic overview

Jim Clarke, Waterford Institute of Technology, NGIatlantic.eu (<u>jclarke@tssg.org</u>)



NGIatntic.eu fourth open call for proposalss

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.

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



10 – Webinar - 28.07.2021

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. These may include trustworthiness issues such as:
 - identity (e.g., self-sovereign-identity), authentication and authorization; traceability; privacy and confidentiality related to personal and non-personal interactions or flow of sensitive information over geographic boundaries, including cryptographic solutions; transparency and accountability (e.g., certificate transparency); and federated, collaborative and/or decentralized technologies for supporting internet-wide e-identities with various levels of identification, reputation and trust, to serve as a basis for new business models for verifying and valuating personal and other sensitive data.
- Resilience issues may include approaches for monitoring, detection and mitigation to counter large-scale disruptions/failures or ongoing/impending cyber-attack/intrusions, and support for crisis situations; these may include techniques for resource redundancy and dynamic reconfiguration; network isolation and virtualization techniques; situational awareness, survivability and self-healing approaches.



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.
- The topic should cover the separation of data from the services provided to the end-users, with a view to ensure seamless combination of internet services and frictionless switching.
- Attention should be paid to <u>experimentation of</u> the technological developments, standardisation of personal profiles, practical handling of data sets mixing personal and non-personal data, operational and business models, as well as techno-legal constraints and the simplification of end-user contracts and terms of use.



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





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.
- This topic welcomes 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.



US partner funding opportunities

Jim Clarke, Waterford Institute of Technology, NGIatlantic.eu (jclarke@tssg.org)



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



- 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 NGIatlantic.eu partners, if they are in successful NGIatlantic.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 NGIatlantic.eu for those with an existing NSF grant (2/2)



- 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 NGIatlantic.eu open call deadline. For OC3, it must be submitted to NSF by 22nd September, 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 NGIatlantic.eu open call (about a page);
 - The project description that was submitted to the NGIatlantic.eu open call;
 - O 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:
 - NSF Cloud: CHAMELEON https://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;
 - O 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.
 - O 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.



Applicants contributions, Open Floor for Questions & Answers



FAQ & Lessons learned from previous Open Calls

Jim Clarke, Waterford Institute of Technology, NGIatlantic.eu (jclarke@tssg.org)



- Topics and Project funding
 - Multi-stream approach to attract EU US experimental platforms to interconnect for future projects;
 - Additional topics brainstormed and selected with US NSF involvement based on their NGI related programs;
 - O Dedicated opportunity for NSF funding for NGIatlantic.eu US partners (if involved already in NSF programs);
 - O Due to alignment of funding between EU and US, there is a focus on min 3 months max 6 months duration projects with a maximum budget of **75,000 euros**;
 - Emphasis on funding more innovators in larger numbers of EU US projects.



- New Platform requirements
 - O Description of Honour (DoH) required to be submitted with the application <u>signed only by EU COO</u>; however, US Team's PI must include a signed Letter of Support within the DoH.
 - O Details on past and / or present NGI applications and EU H2020 applications;
 - O For winning project, GA is **non-negotiable** please review this before submission and make sure you are OK with it, as there will be strictly no negotiations at a later stage; In the first two OCs, we have taken on board all the requested updates for all types of organisations and the GA is now fixed. **All relevant documents** can be found in **Supporting documents** link at the bottom of https://ngiatlantic.eu/ngiatlanticeu-3rd-open-call.
 - Additional fields added to include resources for multi-EU team applications;
 - O Clearer format of **downloadable PDF version of submitted applications**, which can easily be converted to a Word document (e.g. with Adobe Acrobat), if needed.



- Pre-application support continued
 - Coaching calls found to be useful for participants will be continued.
- Some lessons learned from review process
 - Provide a precise, coherent and realistic budget breakdown;
 - Funding is for effort, travel and a fixed 25% OH do not include any other inadmissible costs;
 - O Precise information about the US experimental platforms needed e.g. direct and relevant links for the benefit of the evaluators; if they are linked to current NSF grants, please highlight this with details, as this could be used to obtain supplemental funds from the NSF;
 - O Applicants background in NGI related fields and previous work in NGI-related topics should be explained, **include short CVs of participants in EU and US**;



- Some lessons learned from review process (continued)
 - O Clear and quantified KPIs needed especially of the experiments you will be carrying out;
 - The impacts of the experiments needs to be elaborated, taking into consideration the impacts expected from ICT-31-2020
 - O **Impact 1**: Enhanced EU US cooperation in Next Generation Internet, including policy cooperation.
 - Impact 2: Reinforced collaboration and increased synergies between the EU's Next Generation Internet initiative and the USA's Internet related programmes.
 - Impact 3: Developing interoperable solutions and joint demonstrators, contributions to standards.
 - O **Impact 4**: An EU US ecosystem of top researchers, hi-tech start-ups / SMEs and Internet-related communities collaborating on the evolution of the Internet
 - O Follow FAQs and guidelines and remember to observe the <u>4 criteria scoring scheme carefully</u>, this is what the evaluators will use.



Q. What are the types of travel envisaged?

- A. In normal times, for ST type projects (3 -6 month duration) offered in this call, we recommend at least 2 travels.
- B. As we are still dealing with the COVID-19 crisis and a block on travel from a number of EU Member States to the USA is still in effect (note: there was recent press in the US in 3rd week July 2021 that the US travel ban is being extended again), the applicants should consult with their institutions and local policy makers in relation to policies on travel restrictions in the envisaged period of the project, if successful, and reflect accordingly in your application.



Q. Who can apply to the Open calls as an EU – US "Twin Team" and what is the Team size envisaged?

- A. An EU US "Twin Team" must consist of at least one private or public organisation (not individual researchers), located within the EU Member States (plus UK) or Associated Countries, twinned with a US counterpart for execution of the work programme proposed.
- B. Please note that the NGI initiative typically funds smaller "teams"; in our case, this would be typically 1 partner from EU and 1 partner from US up to a max. of 2 with justification, and not consortia.



Q. Who makes the application and who receives the funding?

- The application will be made by the lead EU team partner, and funding will be limited to coverage of the work to be carried out by the EU partner, as per the EU - US agreement.
- If you require more than one team partner, this is possible but please justify this in your application. The lead EU partner will receive the funding from the NGIatlantic.eu project, and will be responsible for making the payments to the other EU team partner, and have a Consortium agreement with their partner.



Q. Can the EU – US "Twin Team" be affiliated to each other?

A. No, if there is only 1 EU member and 1 US member and they are affiliated to each other administratively, in any way, we don't feel that this would be in the spirit of cooperation envisaged in our EU – US Open calls.



Q. Can you elaborate on the types of travel envisaged?

- A. In normal times, we would recommend for LT type projects (6 month duration) to plan at least 3 travels planned for a. kick-off with the US project team and getting set up on the exp. platform, b. mid-term prototype experiments, and c. final experiments and workshop. Accordingly, for ST type projects (3 month duration), we recommend at least 2 travels.
- B. As we are still dealing with the COVID-19 crisis and a block on travel from a large number of EU Member States to the USA is still in effect, the applicants should consult with their institutions and local policy makers in relation to policies on travel restrictions in the envisaged period of the project, if successful, and reflect this accordingly in your application.



- Q. If my EU US proposal idea doesn't precisely match the proposal call text but it encompasses most of it and is still well related to NGI and the key enabling technologies of NGI, can I submit to the open call?
- A. We are advising proposers that if their proposal has many of the elements of the call text, but even doesn't precisely match, as long as it is with a US based partner and accentuating the Internet of Humans concepts, pillars, and challenges being addressed by NGI, you should still consider to submit. You can also make direct contact with us at contact@ngiatlantic.eu and we can advise you on whether it fits the call, or whether there might be a better fit elsewhere in the NGI initiative.



Q. Where can the U.S. part of the Team receive funding?

A. The funding would be the responsibility of the U.S. team member(s) and they would be aware of the typical funding source(s) that they could tap into. This is dependent on the team member type of their organisation. Some thoughts on what we have been encountering, so far:

- In some cases, the U.S. team members have existing funds already for EU collaborations as part of their ongoing work;
- A number of organisations interested in teaming up with EU partners have signed up in the Twinning Lab at https://www.ngiatlantic.eu/twinning-lab;
- 3. See the information in the previous slides on all the other NSF calls, including the new dedicated *Dear Colleague Letter* **for existing NSF grant holders** specifically for NGIatlantic.eu US – EU twinning;
- If requested, as part of our coaching activities, we are willing to help US partners make a pitch to their current or future funding source(s) by explaining our project and goals, if that would help, but they would need to identify their funding sources as they are better placed to do so.



Q. What cost types are eligible for funding?

- A. Direct costs: Personnel and Travel costs;
- B. Indirect costs: Flat rate overhead on direct costs not to exceed 25%.

Q. Can I include equipment costs?

No. The only admissible costs are personnel and travel and subsistence, and flat rate overhead on direct costs not to exceed 25%.

Q. Can I include project management costs?

Yes, please include under personnel costs, but this must be commensurate with the project size and follow the usual H2020 guidelines of no greater than 5-7% of overall personnel costs budget.



- Q. What if my proposal requires some research and innovation (R&I) in addition to running experiments? Is this permissible?
- Yes, but we recommend that there is a good balance between R&I and Experiments in the proposed project plan. For example, you can carry out the necessary R&I and plan some interim experiments during the project plan, e.g. mid – term and end of project. Please keep in mind that the NGI initiative, in general, is geared towards getting your NGI solutions up and running quickly, and that is why there is a focus on experiments in our open calls.



Q. Can we apply to another NGI RIA's open call at the same time?

- A. Yes, but the NGI initiative is monitoring the situation in terms of potential double funding and operational capacity issues;
- B. Therefore, you must advise us whether you have past applications in other NGI projects (past or present), or EU H2020 projects or previous NGI applications submitted, as this information is being collected and coordinated by NGI for statistical purposes;
- C. In addition, we would advise that you make contact with us at contact@ngiatlantic.eu to find out which would be your best fit.
- D. In summary, the NGI RIAs are coordinating together about their results, to find if there is/are any overlapping activities.



Q. What is the situation regarding the ownership of the foreground Intellectual Property rights resulting from the experiments that will be conducted in the open call projects?

- Generated IPRs will remain at organization level, in this case 3rd party project members accepted in the open call. This will be clarified in the 3rd party contracts.
- Since there is at least 2 partners in an EU US "Twin Team", one from EU and one from US, you will have to have a consortium agreement between yourselves on this matter.
- We can help you with this aspect as part of our mentoring and coaching programme and our winning projects will also be receiving direct assistance from our sister project, NGI TETRA, who are involved with the Technology Transfer and Harvesting of results of the NGI Open Call projects.



Q. Will the COVID-19 crisis affect the project start dates?

A. We are still expecting the start dates of the funded projects to occur within one month of the contract signature; however, we are monitoring the ongoing situation closely and as the NGI initiative is known for its agility, we will work with the winning teams on viable start dates, and also will allow no cost extensions, if needed, as a result of the ongoing COVID-19 crisis.



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 r.tognetti@trust-itservices.com

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







ngiatlantic.eu/contact-us

