

Use chat for questions until the Q&A
Please mute yourselves
Disable video

**WELCOME TO THE NGI
POINTER WEBINAR**

WE START AT 1000

Welcome.

What is the Next Generation of Internet (NGI)? —
Jean-Luc Dorel, European Commission.

What is the NGI Pointer project? — Mirko Presser,
Aarhus University

How to apply for funding? — Claire Tonna, FundingBox
Q&A

● REC



NEXT GENERATION INTERNET

NGI POINTER WEBINAR: INTERNET ARCHITECTURE RENOVATION

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AARHUS
UNIVERSITY



LINKNOVATE

digital worx

<https://pointer.ngi.eu>

NGI
INTERNET OF HUMANS



NGI POINTER

NGI POINTER is funded by the European Commission, as part of the Horizon 2020 Research and Innovation Programme, under Grant Agreement N° 871528 and is framed under the Next Generation Internet Initiative

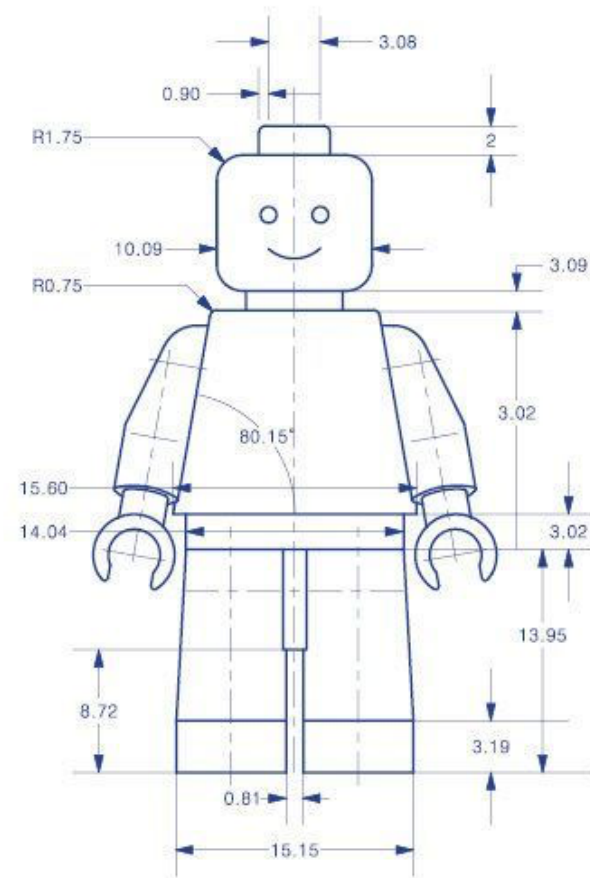
NGI ARCHITECTS CHANGING THE FABRIC OF THE INTERNET AND THE WEB: INTERNET ARCHITECTURE RENOVATION

- Total budget for bottom-up projects 2020-2022:
→ **€5.6m (about €2.5m left)**
- To fund 3rd party projects with the **scope:**
Internet Architecture / Web components / Tools and Methods
- Blue-sky, bottom-up projects
- 1 open call completed
- Second call launched 1 Feb, 2021
- **Closes 1st April, 2021**
- Privacy-by-design;
- Internet at the Edge;
- Network Optimization;
- Virtualization and Isolation;
- Limitations in the TCP/IP protocol suite;
- Autonomous Network Operations and Control;
- **Energy Efficiency;**
- Industrial Internet Security;
- Trust for New Internet/Web Users;
- Open Disruption of the Internet Architecture

What are we looking for?

NGI Architects – the person(s)
is/are very important.

Organisations or Natural Persons:
European-based researchers,
developers, hackers, internet activists,
SMEs, startups, Universities, etc.



What are we looking for?

Scope: Internet Architecture / Web components / Tools and Methods!!!

Minimum Quality Criteria (minimum 1/3)

- Experience contributing to open source
- Experience contribution to Internet Architecture community
- Experience contributing to scientific publications in the Internet Architecture fields

Impacts (minimum 2/3)

- Demonstrable Internet Architecture Renovation
- Open source contributions
- Standardization and roll-out potential

OPEN CALL 1 ACCEPTED PROJECTS

<https://pointer.ngi.eu/ngi-architects/>

- Core Internet Application
- Identity
- Virtualisation
- Transport/Network
- Security
- Tools
- Privacy-by-Design Communication Protocols
- New ideas and paradigms

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○ Core Internet Application:

- **Ltt.rs** - Open source email client (JMAP);
- **Next** - Fully extensible power-browser.
- **Lightmeter** - Email infrastructure reinvented

○ Identity:

- **Id-xover** - Internet-wide identity through realm crossover.

○ Virtualisation:

- **MirageOS** - Deploying MirageOS unikernels.

○ Transport/Network:

- **MPTCP5G** - Multipath TCP for 5G networks;
- **MPTCP** - Multipath TCP;
- **SCE** - Some Congestion Experienced.
- **IGNNITION** - Fast prototyping of complex Graph Neural Networks for network optimisation.
- **RIM** - Receiver-driven Incoming-traffic Management.
- **TA4NGI** - Trust and Authentication for Next Generation Internet.

○ Security:

- **Firmware-lib** - European Firmware and app library.
- **EDGESec** - New architecture for local (edge based) routers.

○ Tools:

- **Linux-Regtracking** - Linux kernel regression tracking.

○ Privacy-by-Design Communication Protocols: 4;

- **KORUZA** - Wireless optical communication system for urban environments.
- **DATAHOP** - Incentivised content dissemination at the network edge.
- **Scuttlebutt** - The Gossip protocol.
- **Peergos** - Decentralised, end-to-end encrypted, and trustless protocol.

○ New ideas and paradigms:

- **DREAM** - Distributed Replicable Extensible Agency Machine.
- **Reowolf** - From low-level internet sockets to high-level programmable connectors.
- **Solid-Shape** - Reshaping linked data on the fly. *
- **VerifiedSCION** - Verified secure routing with SCION. *



What do you get?

Up to 200k EUR

in bottom-up, blue-sky project funding

Up to 12 months

bespoke mentoring programme



LOADING

Some ideas... (work programme)

- Privacy-by-design;
- Internet at the Edge;
- Network Optimization;
- Virtualization and Isolation;
- Limitations in the TCP/IP protocol suite;
- Autonomous Network Operations and Control;
- Energy Efficiency;
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- Trust for New Internet/Web Users;
- Open Disruption of the Internet Architecture

<https://ngi-pointer-open-call-2.fundingbox.com/>



Limitations in the TCP/IP protocol suite

New applications for such things as edge computing or new scalability and security paradigms require new concepts such as decentralized peer-to-peer networks for data distribution and communication.

NGI Pointer seeks new solutions, tools and technologies to overcome the limitations of the TCP/IP protocol stack. With the current development of autonomous machines and artificial intelligence the requirements for stable, secure and flexible communication is changing. TCP/IP has limits in security, latency and reliability as needed for new domains such as machine-to-machine economy, autonomous systems or flexible neural networks for artificial intelligence.



Energy Efficiency

With Agenda 2030 the EU has embarked on a transition towards a low-carbon, climate neutral, resource efficient circular economy that goes hand in hand with increased security, prosperity, equality and inclusion. The ICT sector needs to contribute to these sustainability goals.

NGI Pointer seeks new technologies, tools and architectures for autonomous energy efficiency in ICT. New approaches are needed to reduce the energy consumption of running application or future applications for optimizing their energy efficiency. This can include solutions for software- and hardware applications on monitoring and reducing the energy consumption during processing or new protocol designs with the scope of energy efficiency.

Apply at <https://pointer.ngi.eu>
DEADLINE: 1st April 2021

**ALWAYS PASS
ON WHAT YOU
HAVE LEARNED.**



NEXT
GENERATION
INTERNET



THANK YOU

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Twitter: @NGIPointer



The NGI-POINTER project has received funding
from the European Union's Horizon 2020 Research and Innovation
Programme under Grant Agreement No 871528

NEXT GENERATION INTERNET

THE HUMAN-CENTRIC REVOLUTION
OF INTERNET ARCHITECTURE

How to apply for funding at NGI POINTER?

Claire Tonna, Project Manager, FundingBox

NGI POINTER Webinar, 16th March 2021



NGI POINTER OPEN CALL BASIC RULES

APPLY ON TIME! 1ST APRIL AT 13H BRUSSELS TIME
<https://ngi-pointer-open-call-2.fundingbox.com/>



NGI POINTER OPEN CALL BASIC RULES

READ THE DOCS

Read the [Guide for Applicants](#) and the [FAQ](#) before applying to understand fully this call and make the most out of your application. You can also download the [Sub-Grant Agreement Template \(SGA\)](#) to preview the contract signed between the consortium and the beneficiary once selected for funding.

NGI POINTER OPEN CALL SUBMISSION

[Apply / Start a new application](#)

Your applications to NGI POINTER Open Call 2

Here you will find the applications you have started or submitted.
Make sure you submit your applications before the deadline in 21 days.

[Start a new application](#)

NGI POINTER OPEN CALL SUBMISSION

- Fully on-line, come back later, no paperwork
- You can add a contributor
- You can continue to edit after submitting

Status: Draft
Started a few seconds ago by @clairetonna [Show history](#)

[+ Add a contributor](#)

★ 1	Basic Information*	Fill
★ 2	Legal Information*	Fill
★ 3	Project*	Fill
★ 4	Eligibility Minimum Quality Criteria*	Fill
★ 5	Excellence*	Fill
★ 6	Impact*	Fill
★ 7	Implementation*	Fill
8	Statistical section	Fill
★ 9	Statements*	Fill
★ 10	Processing of Personal Data*	Fill

NGI POINTER OPEN CALL SUBMISSION

Project

Supporting Document
is **NOT** Application
Form

Brief Description *

Tell us about the project which you would like to develop within the NGI-POINTER Support Programme. (Max 1000 characters)

Supporting Document. You can upload here a supporting document of your proposal, if available. This can support the application form with graphics and other important information such as the eligibility minimum quality criteria. There is no predefined template, but maximum 10 standard A4 pages. (Max. 10MB) Note that it is not scored so your main focus should be on addressing the application form.

Click to upload

Upload 

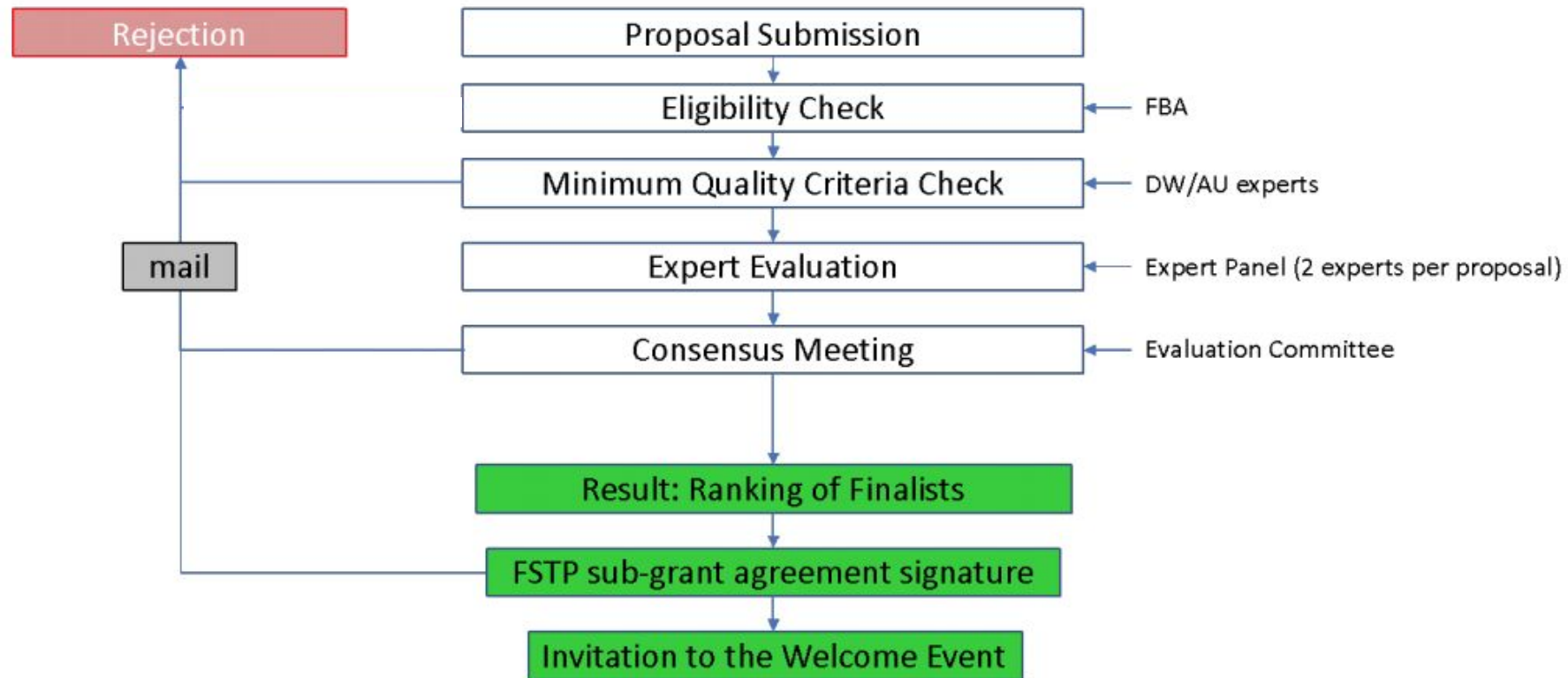
Demo. You can include a link to a demo of your component if available (url)

http://...

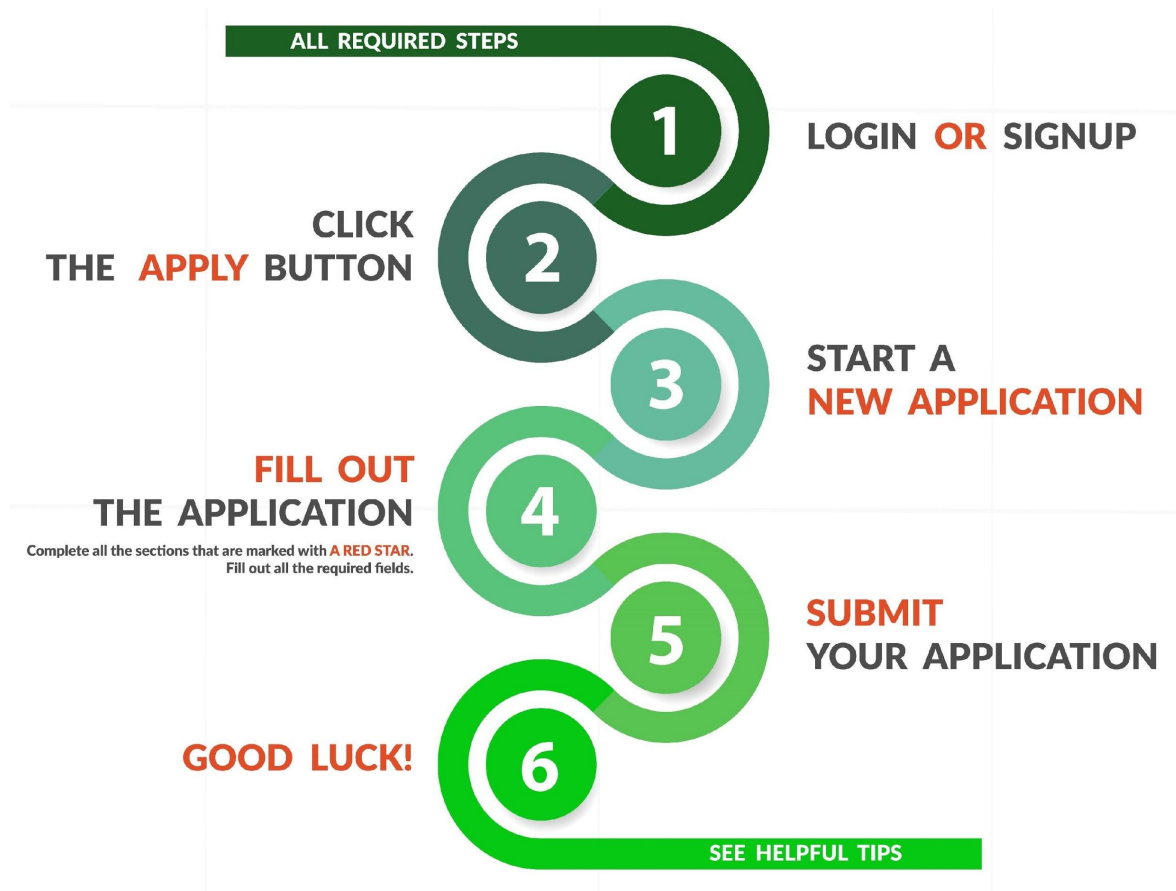
Required fields *

Save and continue

NGI POINTER EVALUATION



NGI POINTER OPEN CALL SUBMISSION



- ❑ Time to apply: 1 – 1.5 day average (simple and fast)
- ❑ You can export your application as PDF
- ❑ You can delete your application (only last proposal considered)
- ❑ Remember to **SUBMIT NOW**

You are ready to submit your application

Submit now

Export this application as PDF

Go to the community

Delete this application

NEED SUPPORT?

Need support? Reach us!

ngipointer@fundingbox.com

<https://spaces.fundingbox.com/spaces/ngi-community-ngi-pointer>

The screenshot shows a Facebook post from the 'NGI Community / NGI POINTER' group, dated 05/30/2020. The post is by user @openwall and contains three questions regarding grant funding. Below the post, there is a 'Read more >' button and a section for replies. One reply is visible from user @oudeis, dated 05/30/2020, which provides an answer to the third question.

NGI Community / NGI POINTER · Started a year ago

05/30/2020
@openwall shared an text.

Hi. Three questions:
1) Is it acceptable to plan on reserving some of the grant's funding to sustain the project for a period beyond the 12 months, so that we're able to pay for infrastructure and its maintenance, provide user support, etc. during a transition period between having the R&D completed (within the first 12 months) and having the project become self-sustainable (through having enough commercial users)? The way I envision this is we base the requested grant amount on our company's commercial rates for our people's time, whereas the rates we pay internally are lower so that we have funds left for work that we receive no income for. (That's also how we use our professional services as a means to fund our non-commercial projects.)
2) Is it acceptable or maybe even desirable to include right in the grant application options for adjusting the project scope and corresponding grant amount? (Per the Guide, the final awarded amount could be different from what's requested anyway.)
3) When applying as an EU legal entity, is it acceptable to also have non-EU people on the team or be invited for specific portions of work later?

Read more >

1 replies · Last reply 8 months ago · View thread >

@openwall 05/30/2020
We also could use an answer to @oudeis question "Where can I specify the legal person in the online form", and whether it is even expected that we specify that or not.

1 replies · Last reply 8 months ago · View thread >

@oudeis 05/30/2020

THANK YOU

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