

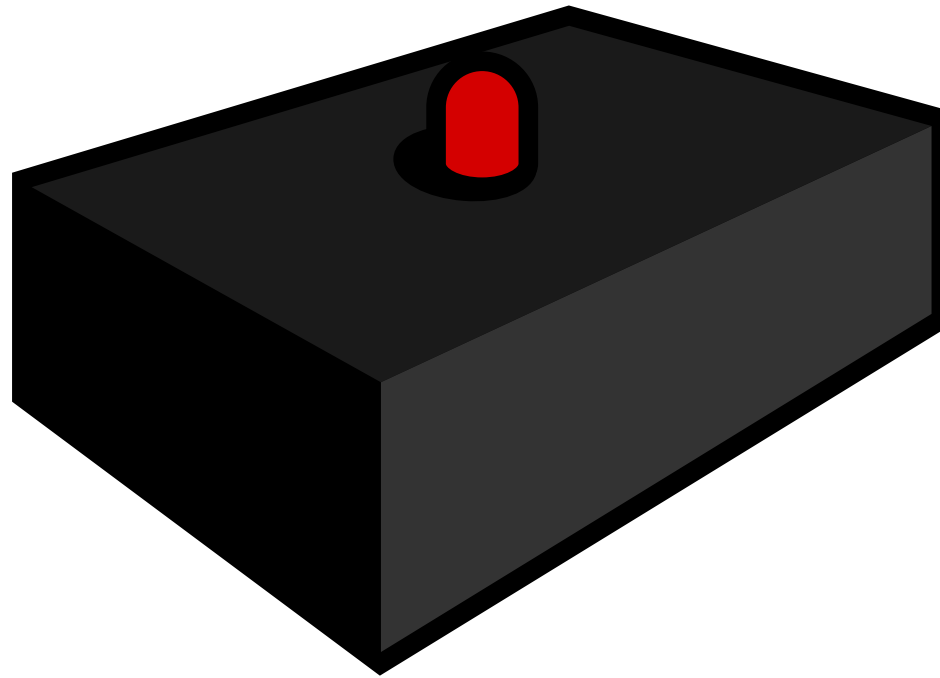
NEXT GENERATION INTERNET

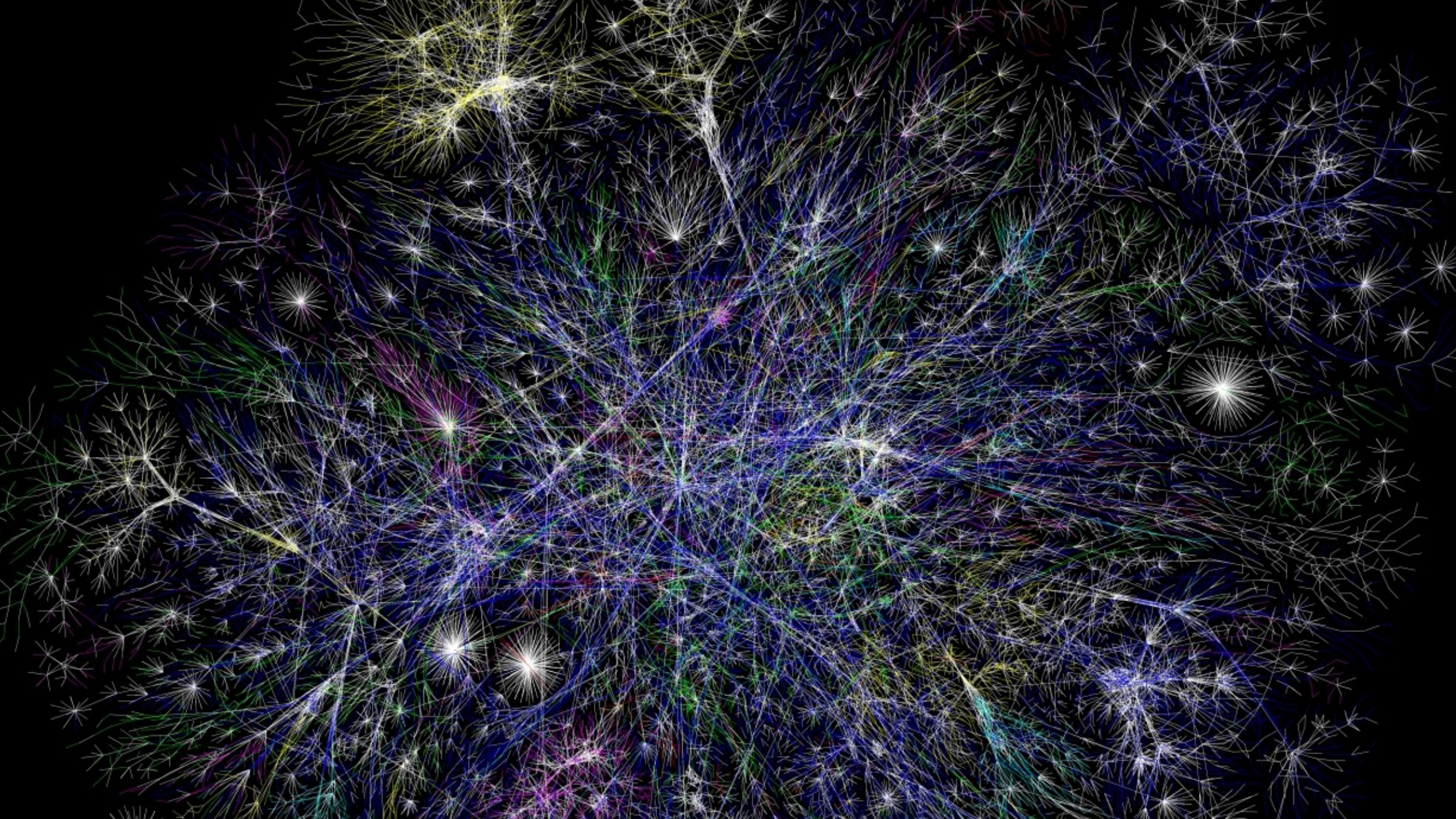
What is the NGI Assure project?

NGI Assure Webinar – Michiel Leenaars (NLnet foundation)



THE INTERNET





THE INTERNET IS A NETWORK OF INDEPENDENT NETWORKS

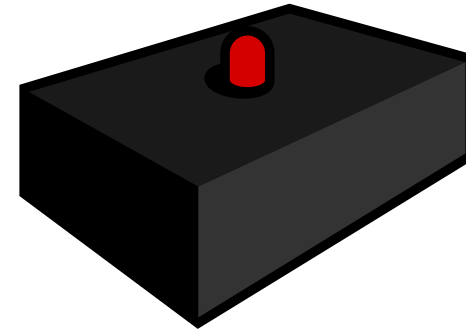
Not a coherent professional infrastructure but the sum of many independent networks, owned and operated by small and large organisations (and even individuals).

Plus some glue components:

.. like internet exchanges, owned by private organisations.

... like nameservers, also owned by private organisations.

... like spying equipment, also owned by private (and some public) organisations



AND IT IS REALLY LAYERED ...

- Connections
 - Physical links.
 - Electrons. Light. Radio.
 - Senders. Receivers.
- Conventions
 - Standards
 - Protocols
 - Operational practises.
- Code + commodity
 - Ubiquitous code (Open source)
 - A lot of legacy hardware
 - Including your devices

Changing the core conventions of the internet means billions of (quasi-coordinated) changes across existing networks that have never changed that way before.

WHY NGI ASSURE



The goal of NGI Assure (NGI-GO2S) is to support projects that design and engineer **reusable building blocks** for the Next Generation Internet as part of a complete, strong chain of **assurances** for all stakeholders

These assurances concern the source and integrity of what you find on the internet:

- Data
- people (identities)
- Identifiers
- cyberphysical systems
- service components
- processes.

VISION FOR THE NEXT GENERATION INTERNET

“The overall mission of the Next Generation Internet initiative is to re-imagine and re-engineer the Internet for the third millennium and beyond. **We envision the information age will be an era that brings out the best in all of us.** We want to enable human potential and creativity at the largest possible scale. In order to preserve and expand the European way of life, we shape a value-centric, human and inclusive Internet for all.”

An internet of human values
Resilient. Transparent. Sustainable.

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These ambitions need a solid foundation to build on. The legendary robustness of the Internet must become actual reality in the Next Generation Internet. A massive global fleet of connected devices is on its way to enhance and control our homes, factories, offices and vehicles. Technology is embedded in concrete, circling in space and is increasingly entering the intimacy of our bodies. The Next Generation Internet has to be highly adaptive and **resilient**. Whatever happens, companies or parts of the network go down by some natural or other disaster, the effect on the rest of us should be close to zero.

There is another important dimension to trust, which lies above physical availability. In a **transparent** technological environment, that is trustworthy. The architecture, governance and policies structure how entire societies and economies interact. By design it should protect speech and private enterprise and much more. The Next Generation Internet is to be built to avoid any bias or systematic abuse of global trust in the Internet. It shall be a true global commons, rising above international politics and competition. It will guarantee the safety of citizens and strengthen the health and autonomy of our markets and societies.

The enduring success of the Internet lies in permission-free innovation, openness and interoperability. The Next Generation Internet is set up to create wider choice. It fosters diversity and decentralisation, and grows the potential for disruptive innovation. This extends far beyond the technical realm. The Next Generation Internet will achieve a **sustainably open** environment for our cultures and economies, celebrating our values and promoting creativity and well-being.

Let's re-invent Internet to reach the full human potential, for all generations.



FREE/LIBRE OPEN SOURCE BUILDING BLOCKS

... that contribute to providing such assurances
to actual users

•

This include (but are not limited to) quantum-proof cryptography, public key infrastructure, (augmented) authenticated key exchange, ratchet mechanisms (such as the Noise protocol) that securely chain key material, distributed hash tables and DAGs to make P2P interaction more secure, conflict-free replicated data types, mixnets and onion routing mechanisms, consensus protocols, distributed ledgers and (post) blockchain technologies that create redundant data sets managed independently by mutually distrustful parties, a priori usage control, symbolic and formal proofs, and tamperproof open hardware implementations of core cryptographic primitives.

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**What you think
helps actual users**

QUESTIONS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 957073

NEXT GENERATION INTERNET

NGI ASSURE WEBINAR
2ND OPEN CALL – HOW TO APPLY

March 4th 2021

Nuno Manarte, Project Manager

FundingBox



HOW TO APPLY?

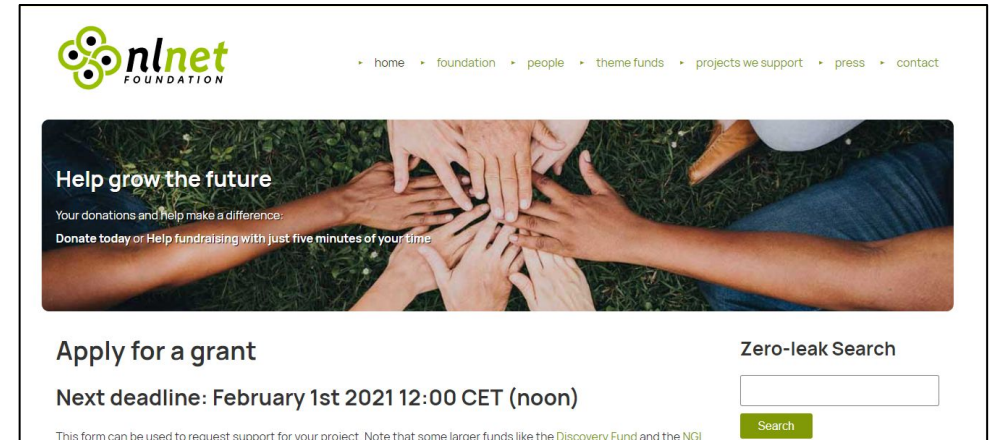
<https://ngi-assure-opencall.fundingbox.com>



Use this website if you want to be able to save your application and continue editing before submitting.

OR

<https://nlnet.nl/propose>



Use this website if you:

- want to submit anonymously.
- are under 18.

HOW TO APPLY?

- Short and simple application form (prepare and submit in one sitting)
- No difference in evaluation of applications from either website. **Please don't** submit the same application to both websites.
- You cannot edit your application after submitting.
- Please read the [Guide for Applicants](#) and [FAQs](#) before applying.
- Apply before **April 1st 12:00 PM CET** (Brussels time).
- Next Open call from 1 April to 1 June 2021.

WHAT DO WE OFFER?

- You can apply for a grant between 5 000 and 50 000 Euro.
- Technical and business support according to the needs of each project.
- If the initial project works out well, you can follow up with other project proposals.
- A follow up only makes sense if the idea turns out to be exceptionally good, and you prove the feasibility of your approach and your ability to execute.
- 200 000 Euro hard limit for any applicant for the programme.

APPLICATION FORM

FundingBox





Your applications to NGI Assure

Here you will find the applications you have started or submitted.

● #0 - Draft - Started 5 minutes ago

[Edit](#)

[Start a new application](#)



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APPLICATION FORM

FundingBox - Start a new application



This application was NOT submitted

Fill in all the required form sections to submit your application.

Click to add a contributor to your form



Status: Draft

Started 6 minutes ago by @Nuno

Show history

+ Add a contributor

★ 1	Basic Information*	Fill
★ 2	Project description*	Fill
3	Attachments	Fill
★ 4	How may we handle your information*	Fill

Click to fill in the different sections



You can export the application as a PDF



★ Required sections. Fill in all marked sections to submit the application.

Export this application as PDF

Delete this application

APPLICATION FORM

FundingBox – Sections marked with a star are obligatory.

Contact information

Your name *

Email address *

Please enter the email address in format: mail@mail.com

Phone number *

Please provide your phone number including the country code

Organisation *

if any

Country *

General project information

Project name *

Please tell us the name of your project

Website / wiki *

URL (https://... or http://...)

Required fields *

After editing,
don't forget to
click Save and
continue at the
bottom of the
page



Required fields *

Save and continue

APPLICATION FORM

FundingBox – Basic information section .Fields marked with a star are obligatory.



Project description

Please be short and to the point in your answers; focus primarily on the what and how, not so much on the why. Add longer descriptions as attachments (see below). If English isn't your first language, don't worry - our reviewers don't care about spelling errors, only about great ideas. We apologise for the inconvenience of having to submit in English. On the up side, you can be as technical as you need to be (but you don't have to). Do stay concrete. Use plain text in your reply only, if you need any HTML to make your point please include this as attachment.

Abstract: Can you explain the whole project and its expected outcome(s). *

(you have 1200 characters)

Have you been involved with projects or organisations relevant to this project before? And if so, can you tell us a bit about your contributions?

(Optional) This can help us determine if you are the right person to undertake this effort

Requested support

Requested amount *

between 5 000 and 50 000 Euro

Explain what the requested budget will be used for? Does the project have other funding sources, both past and present? (If you want, you can in addition attach a budget at the end of the form) *

Explain costs for hardware, human labor, travel cost to technical meetings, etc.

Compare your own project with existing or historical efforts. *

(e.g. what is new, more thorough or otherwise different)

What are significant technical challenges you expect to solve during the project, if any?

(optional but recommended)

Describe the ecosystem of the project, and how you will engage with relevant actors and promote the outcomes? *

(E.g. which actors will you involve? Who should run or deploy your solution to make it a success?)

After editing,
don't forget to
click Save and
continue at the
bottom of the
page



Required fields *

Save and continue

APPLICATION FORM

FundingBox – Project description. Fields marked with a star are obligatory.



To realize the Project data can be transferred also to Project Partners (complete list of the project partners is available at the email address: privacy@fundingbox.com), European Commission and other affiliated entities.

RIGHTS OF DATA SUBJECT

Due to the fact that we process your personal data, you have the right to:

1. request access to your personal data,
2. demand the rectification of your personal data,
3. request to remove or limit the processing of your personal data,
4. complain with the supervisory authority (The President of the Personal Data Protection Office, Warsaw, Poland, <https://uodo.gov.pl/en>).

You also have a right to object to processing of your personal data (according to the Article 21 of GDPR).

INFORMATION ABOUT VOLUNTARY OR OBLIGATORY DATA PROVISION

Providing data is voluntary, although it is necessary to participate in the Open Call. Without providing your data, it is not possible to contact you and evaluate the application.

I confirm that I read and understood the information clause concerning processing of the personal data provided above: *

☐ Yes ☐ No

Please, enter your name: *

I confirm I will pass the information clause provided above to all team members mentioned in the application form: *

☐ Yes ☐ No

Required fields *

After editing,
don't forget to
click Save and
continue at the
bottom of the
page



Required fields *

APPLICATION FORM

FundingBox – Data protection clause. Fields marked with a star are obligatory.

+ Add a contributor

★ ✓	Basic Information*	Edit
★ ✓	Project description*	Edit
3	Attachments	Fill
★ ✓	How may we handle your information*	Edit

★ Required sections. Fill in all marked sections to submit the application.

When you are finished
you must submit your
application



You are ready to submit your application

Submit now

Export this application as PDF

Delete this application

You **cannot** edit the
application after
submission



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APPLICATION FORM

FundingBox – Data protection clause. Fields marked with a star are obligatory.

APPLICATION FORM

NLnet

Please select a call

In the list of current calls below, please indicate the **call topic** you are responding to. You can apply to compete in multiple calls in the same round if your project falls across different themes, but you will of course only be allocated funding once.

Thematic callNGI Assure

Contact information

Your name

(Your name -> quick check: did you select a call?)

Email address

Phone numbers

+

Organisation

(if any)

Country

General project information

Project name

(Please tell us the name of your project)

Website / wiki

https://

Please be short and to the point in your answers; focus primarily on the what and how, not so much on the why. Add longer descriptions as attachments (see below). If English isn't your first language, don't worry - our reviewers don't care about spelling errors, only about great ideas. We apologise for the inconvenience of having to submit in English. On the up side, you can be as technical as you need to be (but you don't have to). Do stay concrete. Use plain text in your reply only, if you need any HTML to make your point please include this as attachment.

You can submit anonymously but you must provide contact information.

News

NGI Assure wan
privacy guarantees 2020-12-01

NGI Zero shares best practices for
secure, accessible, localized and
inclusive technology 2020-10-05

Open call for funding 2020-10-01

Have a private Jitsi chat or do cross-
system search with latest NGIO
projects 2020-09-10

Open call for funding 2020-08-01

Encryption in Zoom calls verified by
NGI-supported Verifpal 2020-06-11

Open call for funding 2020-06-01

You must select the Open
Call to which you want to
apply.

APPLICATION FORM

NLnet – Choose the NGI Assure open call and fill in your application.



Abstract: Can you explain the **whole project** and its expected outcome(s).

(you have 1200 characters)

Have you been involved with projects or organisations relevant to this project before? And if so, can you tell us a bit about your contributions?

(Optional) This can help us determine if you are the right person to undertake this effort

Requested support

Requested **Amount** (in Euro)

Explain what the requested budget will be **used** for?
Does the project have other funding sources, both past and present?
(If you want, you can in addition attach a budget at the bottom of the form)

Explain costs for hardware, human labor, travel cost to technical meetings, etc.

Compare your own project with existing or historical efforts.

(e.g. what is new, more thorough or otherwise different)

What are significant technical **challenges** you expect to solve during the project, if any?

(optional but recommended)

Describe the **ecosystem** of the project, and how you will engage with relevant actors and promote the outcomes?

(E.g. which actors will you involve? Who should run or deploy your solution to make it a success?)

Attachments

Attachments: add any additional information about the project that may help us to gain more insight into the proposed effort, for instance a more detailed task description, a justification of costs or relevant endorsements. Attachments should only contain background information, please make sure that the proposal without attachments is self-contained and concise. Don't waste too much time on this. Really.

Accepted formats for attachments are:
HTML, PDF, OpenDocument Format and plain text files.

Seleccionar archivo	Ningún archivo seleccionado
Seleccionar archivo	Ningún archivo seleccionado
Seleccionar archivo	Ningún archivo seleccionado

APPLICATION FORM

NLnet – All application form sections are on the same page.

How may we handle your information

(If you haven't, please check [our privacy policy](#)).

When your project gets selected, we will legally need to retain your information for compliance purposes for at least seven years. Also, in case you are submitting to one of the NGI related funds, at that point we will need to share some information with our (not-for-profit) partner organisations in order so they may assist you with mentoring as well as complementary services e.g. accessibility, documentation, localisation, packaging, etc. By submitting a proposal you grant us permission to handle the data in the proposal in the manner described.

What should we do in the other case, e.g. when your project is not immediately selected?

☒ I allow NLnet Foundation to **keep** the information I submit on record, should future funding opportunities arise

☐ I want NLnet Foundation to **erase** all information should my project proposal not be granted

☒ Send me a copy of this application.

PGP
pubkey

(optional, only if you have it and want us to use it. Make sure the key is valid for at least two more months after the deadline)

Send request

We will contact you within a few days after the deadline. Alternatively (or in case of urgency), you can [contact us](#) in a number of ways.

You **cannot** save your application and edit later.

When you are finished you must submit your application

APPLICATION FORM

NLnet – You must prepare and submit your application in the same browser session.



Q&A

Still have questions?

[Reach out to us in the NGI
Assure community](#)

or

send your questions to:
ngi-assure@nlnet.nl

THANK YOU!

Nuno Manarte

Project Manager
nuno.manarte@fundingbox.com



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 957073