

NGI Zero: year 0

Come work for the internet
on privacy, trust, search & discovery

**Powered by the
European Commission Directorate-General
for Communications Networks
Content and Technology**

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FOSDEM 2019

2019-02-03

TODAY WE CREATE THE
INTERNET
OF TOMORROW



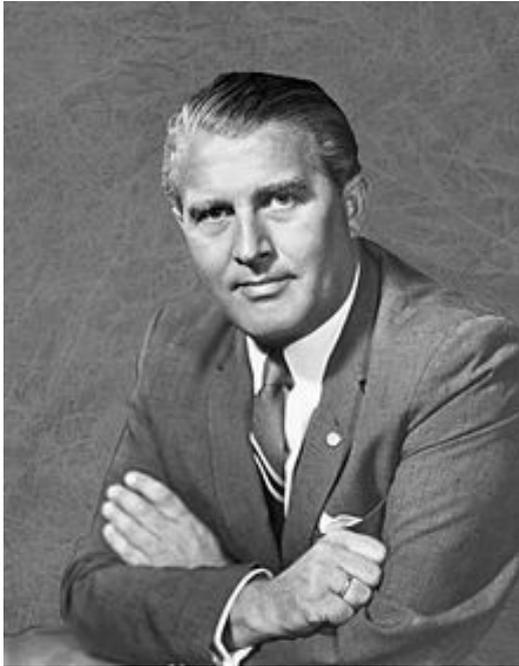
“From utopia to dystopia in just 29 short years”

“We demonstrated that the Web had failed instead of served humanity, as it was supposed to have done, and failed in many places. The increasing centralization of the Web ended up producing—with no deliberate action of the people who designed the platform—a large-scale emergent phenomenon which is anti-human.”

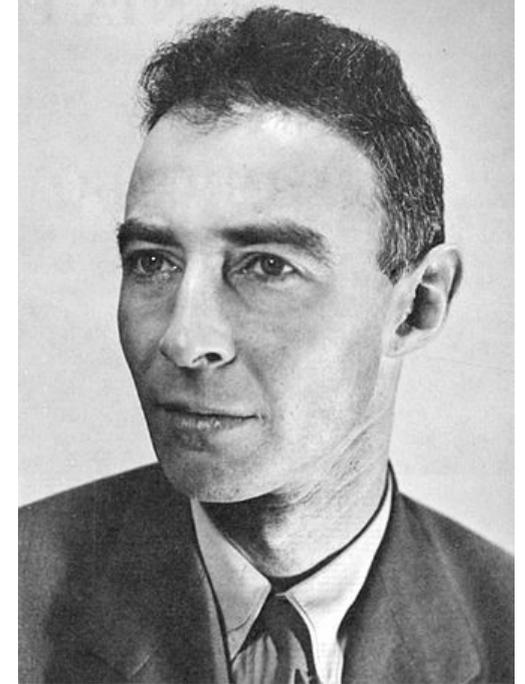


Tim Berners-Lee

An engineering race with high stakes



Wernher von Braun



Robert Oppenheimer



NGI is a moonshot ++ effort

- The internet is the **largest** and **most pervasive** technical construct ever made by humans
- And we need to change it with 3.8+ billion people 'on board'.
- High political stakes. High economic stakes. Highly critical users users. Overloaded with expectations. From everybody.
- Work consistent and forward-thinking. No time to lose.



Consultation



Draft Topic analysis



Initial draft vision

An Internet of human values
Resilient, Transparent, Sustainable

The overall objective of the Internet of human values is to create a digital world that is resilient, transparent, and sustainable. This vision is based on the principles of human values, which are the foundation of a good society. The Internet of human values is a digital world that is resilient, transparent, and sustainable. This vision is based on the principles of human values, which are the foundation of a good society.

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Expert workshop



Topic analysis



Clustering

Proposed vision

An Internet of human values
Resilient, Trustworthy, Sustainable

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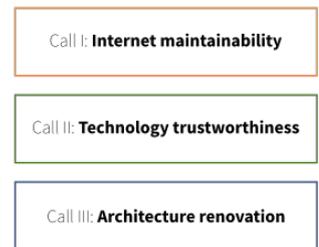
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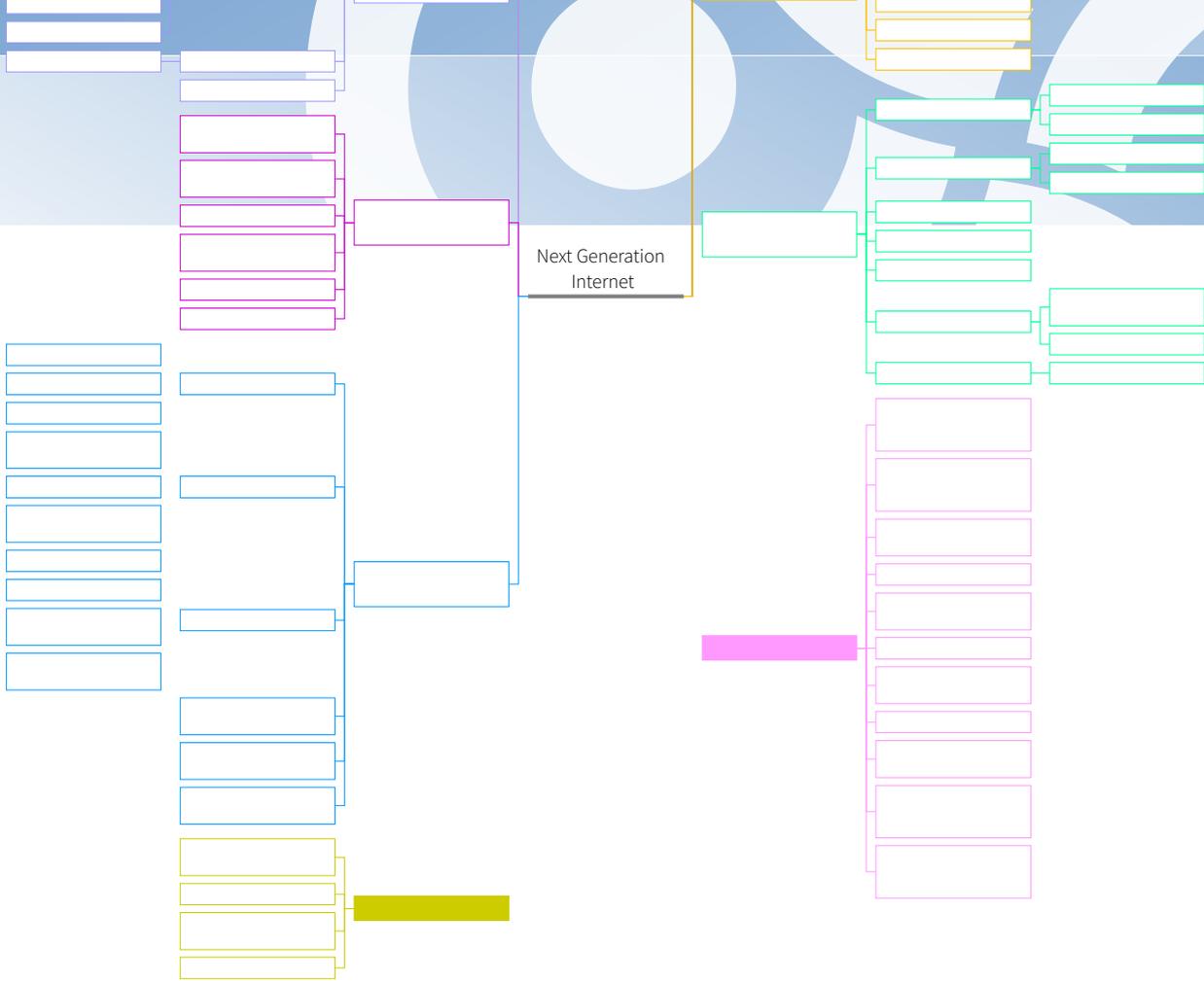


Pre-NGI (H2020)

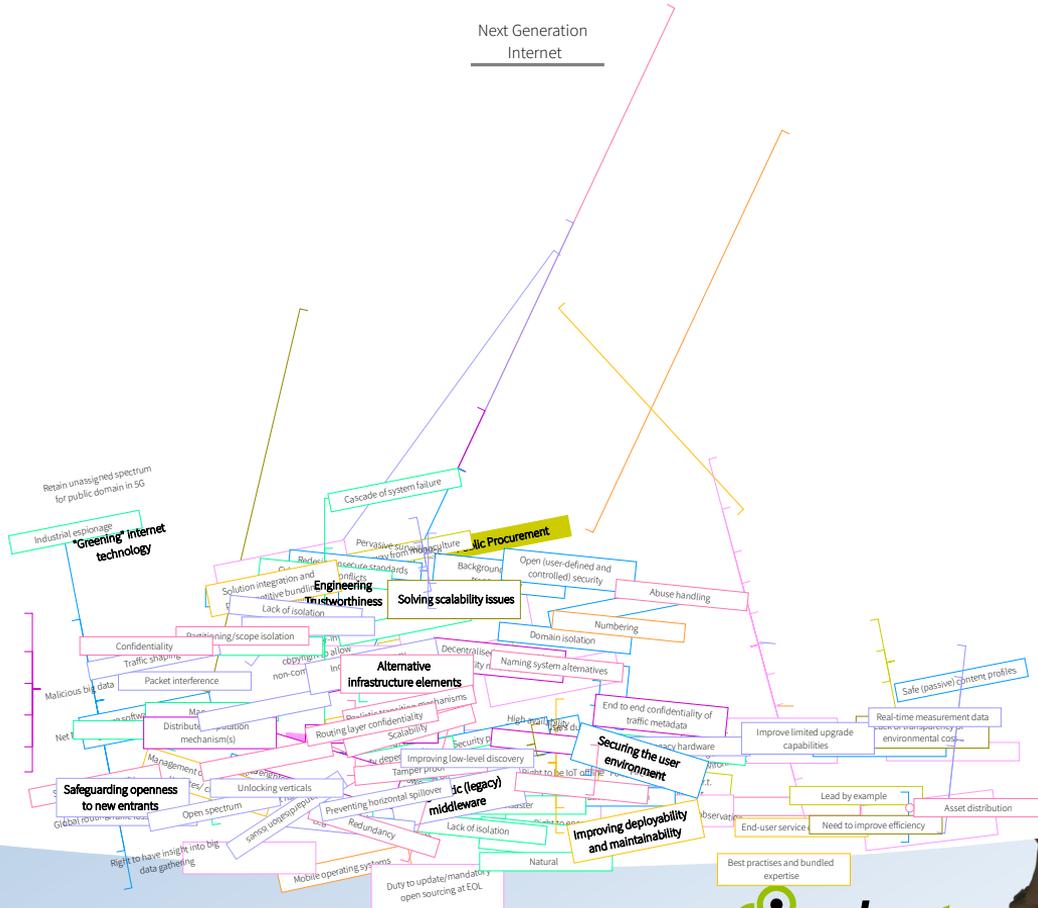


NGI Flagship (after 2020)





Next Generation Internet



The larger ecosystem



DIGITALEUROPE 



NGI Vision

“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.”

Read full text at <https://ngi.eu/vision>



Facilitate incremental innovation as tech commons

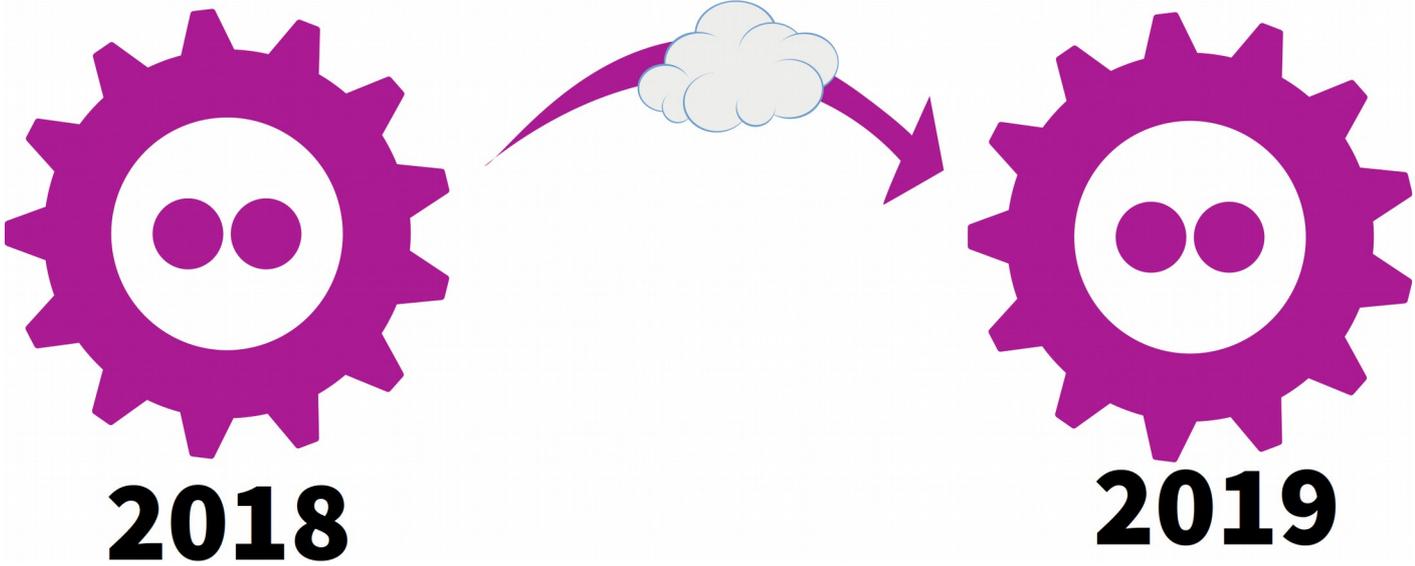


'R&I Actions' should encourage, when relevant, **open source** software and **open hardware** design, access to **data**, **standardisation** activities, access to testing and operational infrastructure as well as an IPR regime ensuring lasting impact and **reusability** of results.

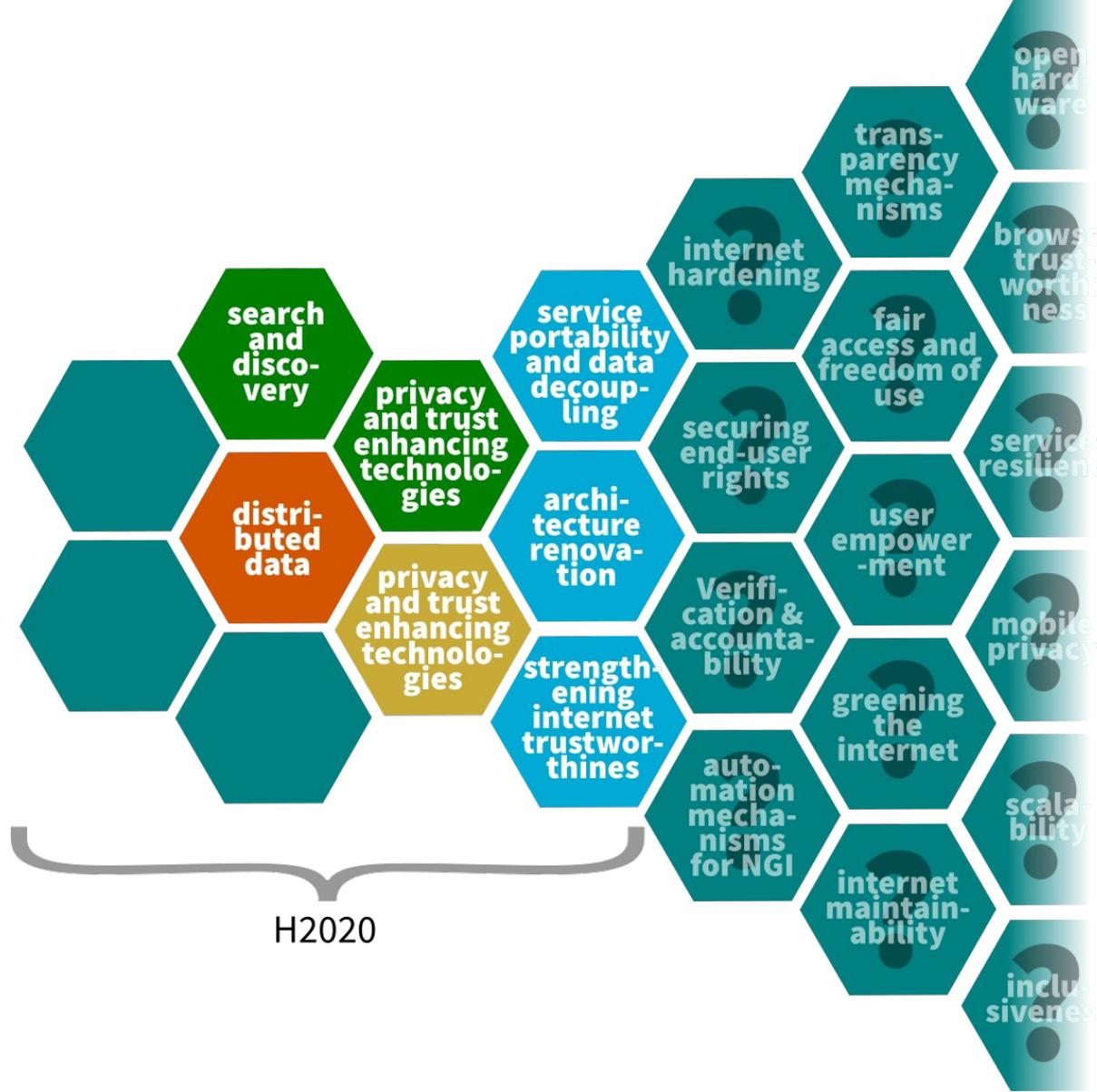
One year ago in a room rather close to this one...



Fast-forward...



Next Generation Internet Research & Innovation actions







▶ home ▶ foundation ▶ people ▶ funding possibilities ▶ theme funds ▶ [projects we support](#) ▶ press ▶ contact



your donations
make a difference



News

[NGI Zero awarded two EC research and innovation actions 2018/12/01](#)

[EC publishes study on Next Generation Internet 2025 2018/10/05](#)

[Bob Goudriaan successor of Marc](#)

Open call for funding

Deadline for submission: April 1st 2019

[Submit a proposal](#)

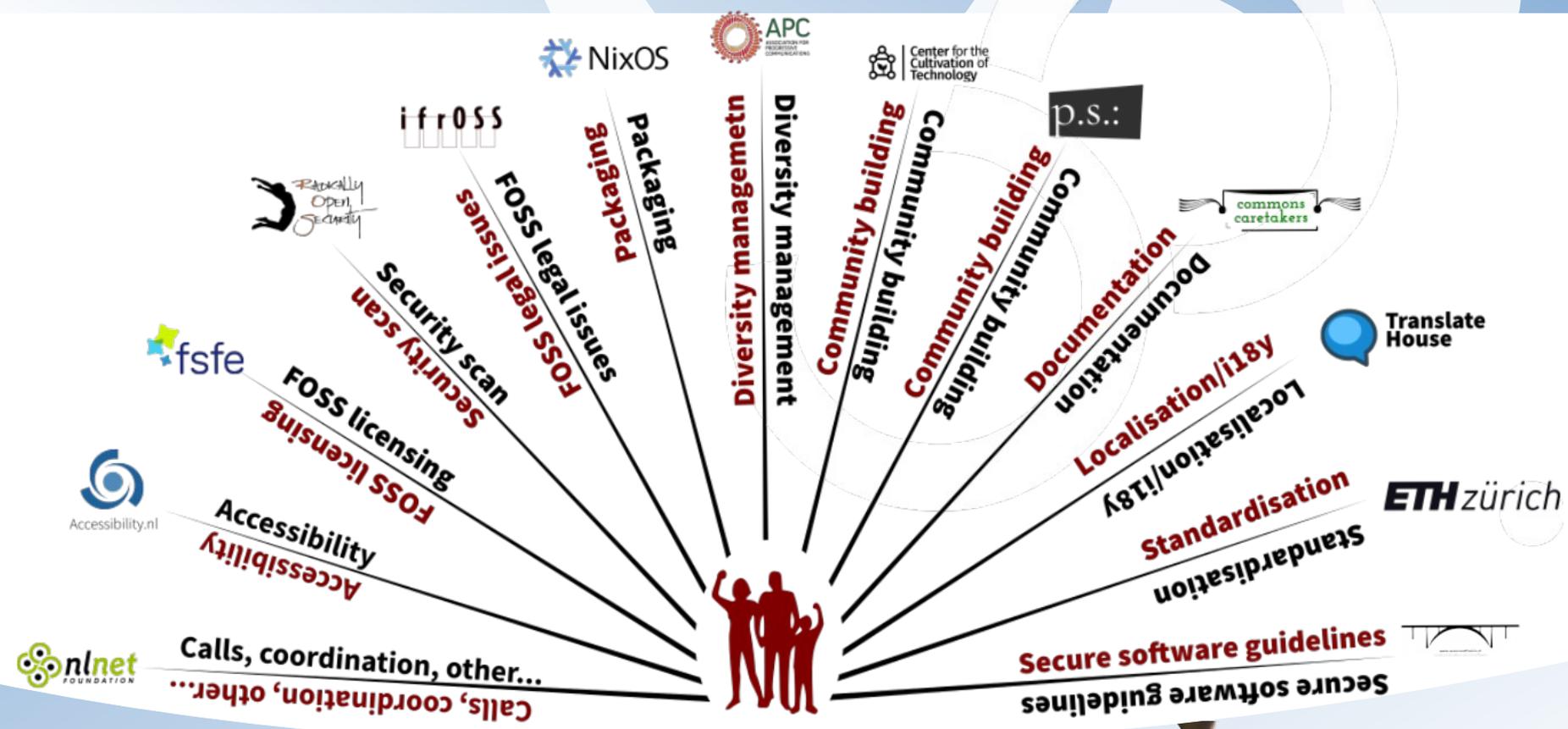
Do you have a valuable idea in the area of networking and internet technology, [privacy and trust enhancing technologies](#) or [search and discovery](#)? And are you looking for financial means to make your ideas come to life? Or do you

Calls

[Send in your ideas.](#)
Deadline April 1st, 2019.

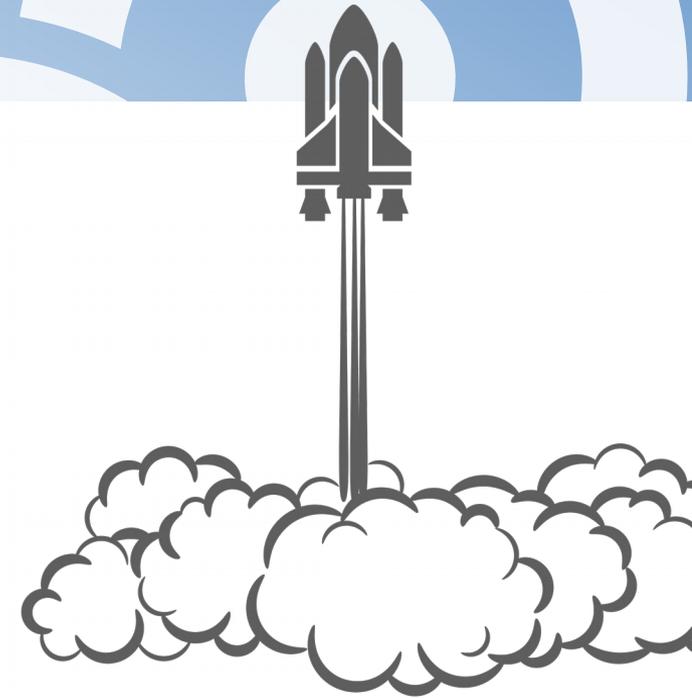
**HELP FUNDRAISING FOR THE
OPEN INTERNET
WITH FIVE MINUTES OF YOUR TIME**

Project-centric



Our approach

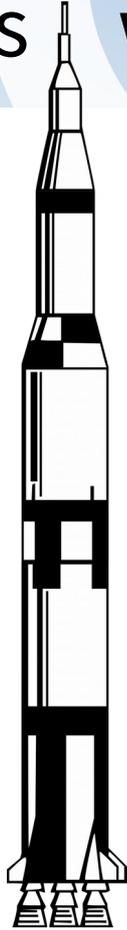
Design a light-weight and confidential application procedure providing adequate insight into technical capabilities as well as the urgency, relevance and relative cost effectiveness of the projects proposed at a low cost to the **applicants**.



Weight	Criterion
30%	Technical excellence/feasibility
40%	Relevance/Impact/Strategic potential
30%	Cost effectiveness/Value for money



Improve ideas where needed



.. we use a staged approach which identifies and amends missing or inadequate aspects of the proposals prior (and conditional) to the start of a project.

... and guide and support projects with essential QA and strategic aspects that require additional expertise



Be consistent in requirements and best practices

Make sure every project delivers on **accessibility**

Make sure projects can be **localised**/internationalised

Make sure **licensing** is compatible and all legal stuff is in order

Support with dealing with **standards** setting organisations

Provide a **responsible disclosure** procedure

Provide **documentation** for users/developers



(continued)

Mentor with applying best practices
in **secure software** development
across all projects

Create a **reproducible** build
environment and help design
automated tests

Perform an early stage
independent **security scan** of
the project plan

Make software **available** early
to allow for 'many eyeballs'

Independent **security scan** of
the actual outcomes



(continued)

Liaise and mentor projects with interacting with **ecosystem** and **target groups**, e.g. technical and operational community, digital rights organisations, free software community, businesses, consumer organisations, end users

Manage and support **diversity** and gender bias in the design phase



Privacy & Trust Enhancing Technologies



Privacy & Trust Enhancing Technologies

Privacy isn't dead, but we lack the right tools to protect our intimacy

Reliability, confidentiality, integrity and security should be the '**new normal**' of the internet, something ordinary users should not have to worry about.

Trust is one of the key drivers for the Next Generation Internet, and an adequate level of privacy is a non-negotiable requirement for that.



Next Generation Search & Discovery



Next Generation Search & Discovery

The pen may be mightier than the sword, but how does it fare against the search button?

Search should not be a gatekeeper, a black box or a privacy nightmare. If the internet is the equivalent of a global brain, we need creativity and diversity in the pathways across that brain to unlock its true potential. Search and discovery are basic human needs for humans of all ages, and we would like to put powerful new technology in the hands of future generations as building blocks for a fair and democratic society and an open economy that benefits all.



Key characteristics

**search
and
discovery**

5.6 million euro
in small grants
between now and
2021

Competitive calls every
two months until the
budget is allocated.

Projects between 5k-50k

Walk the talk:

Inclusion

Security

Localisation

Open Standards

Free & Open Source

Deliver to deploy

**privacy
and trust
enhancing
technologies**

5.6 million euro
in small grants
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2021

For other calls and more info

**privacy
and trust
enhancing
technolo-
gies**

5.6 million euro
in grants between
now and 2021

NGI Trust
LEDGER

Go to
<https://ngi.eu>
and navigate to
Open Calls

**distri-
buted
data**

5.6 million euro
in grants between
now and 2021



The Team



Accessibility.nl



Center for the
Cultivation of
Technology



NixOS



Everything we ever learned about grant management and maturing technology comes together in NGIO.
The idea of great grant making is after all simple: it is not about the funder, but about the fundees.

ETH zürich





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join us and help discover and shape the next generation internet
and claim your spot in human history

Full time and part-time paid and unpaid positions available.

Read all about it on

👉 <https://nl.net.nl/discovery>

👉 <https://nl.net.nl/PET>

👉 <https://ngi.eu>



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