“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.”
10 layers of technology in NGI

- Decentralised solutions, including blockchain/distributed ledger
- Data and Artificial Intelligence
- Services and Applications
- Vertical use cases, search and community
- Trustworthy hardware and manufacturing
- Network infrastructure incl. routing, P2P and VPN
- Software engineering, protocols, interoperability, cryptography, algorithms, proofs
- Operating Systems, firmware and virtualisation
- Measurement, monitoring, analysis and abuse handling
- Middleware + identity incl. DNS, authorisation, authentication, distribution/deployment, operations, reputation systems
The goal of NGI Assure is to support projects that design and engineer **reusable building blocks** for the Next Generation Internet to make distributed collaboration easier, and deliver a complete, strong chain of technical **assurances** for all stakeholders.

This for instance concerns the source and integrity of what you find on the internet:

- data
- people (identities)
- identifiers
- cyberphysical systems
- service components
- processes.
NGI Assure
Efforts to make security, trustworthiness and distributed collaboration easier.
28 projects from 13 countries, €1.05 million allocated. Next deadline: October 1st.
Back-to-back bimonthly open calls.
From 5k€ to 50k€ for first project, with scale-up possibility. Open to individuals and organisations of any type. Libre/open source only.

quantum-proof cryptography □ public key infrastructure □ (augmented) authenticated key exchange □ ratchet mechanisms (such as Noise) distributed hash tables □ DAGs □ conflict-free replicated data types mixnets and onion routing mechanisms □ consensus protocols distributed ledgers and (post) blockchain technologies □ a priori usage control □ symbolic and formal proofs □ tamperproof open hardware implementations of core cryptographic primitives □ etcetera
Privacy and Trust Enhancing Technologies
149 ongoing projects involving 264 agents from 37 countries. M€ 5.6 allocated. 

Back-to-back bimonthly open calls.
From 5k€ to 50k€ for first project, with scale-up possibility.
Open to individuals and organisations of any type. Libre/open source only.

Search, discovery and discoverability
135 ongoing projects involving 222 agents from 29 countries. M€ 4.7 allocated.

Next deadline: October 1st.

Full.
These projects have received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreements No 825310, 825322 and 957073
Short introductions from NGI Zero, NGI TETRA and NGI Pointer (internet infrastructure grant program)

- **Presentations**
- Onur Emul - NGI TETRA
  A brief introduction on the topic of intellectual property (IP) management
- Armijn Hemel - Tjaldur Software Governance
  A presentation on defensive publication approaches
- Gabriel Ku Wei Bin - Free Software Foundation Europe
  Discussing the basics of open source software licensing
- Keith Bergelt - Open Invention Network
  IP management in open hardware projects
- Michiel Leenaars - Commons Conservancy
  Legal infrastructure for open source projects