NGI

Partnership for innovative technological solutions to ensure privacy & enhance trust for the human-centric Internet

Overview of NGI_Trust operations & our portfolio of projects

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NGI_TRUST in a snapshot

Project partners

Key facts & figures

- Duration: December 2018 - November 2021
- 3 open calls (spring 2019-spring 2020) :
  - 300 applications
  - 448 applicants
  - 36 countries

- 3rd party funding awarded: €5.64m
  - 57 funded projects
  - 84 funded third parties
  - From 20 countries

NGI_TRUST objectives

1. Reinforce, structure and develop the community of researchers, innovators and technology developers in the field of privacy and trust enhancing technologies

2. Build on the state of the art in privacy and trust enhancing technologies by focusing support for third-party projects in a limited number of priority topics

3. Improve user trust and acceptance of emerging technologies by focusing on applications and solutions that develop a more open, robust and dependable Internet and strengthen Internet Governance

4. Foster the exploitation and commercialisation of the results of selected third-party projects through a tailored process of coaching and mentoring

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NGI_TRUST 'operating principles'

- Explore potential solutions for selected privacy and trust enhancing topics (identified by the Advisory Board) critical to building a Human Centric Internet
- Engage a variety of players - not just "usual H2020 suspects" – through outreach to broadest range of applicants possible – type of applicant, geography, etc.
- Fund a range of projects with the aim to explore novel ideas (feasibility testing) but also use cases closer to applications and with potential to be scalable
- Co-financing principle for closer to market projects (leverage EU funds).
- Provide technical coaching during projects' implementation and mentoring/IP advice to optimise follow-on development or application of results.

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NGI_TRUST is funding 57 third-party projects selected via three rounds of open calls

Call 1 :
1/2/19-30/4/19

- 109 proposal received
- 18 projects funded
- Funding awarded : €2,112,723

Call 2:
1/10/19-1/12/19

- 79 proposals received
- 19 projects funded
- Funding awarded : €1,582,093

Call 3:
28/2/20-4/5/20

- 112 proposals received
- 20 projects funded
- Funding awarded: €2,025,337

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Open Call priority topics (1)

Third-party projects received financial support to work on privacy and trust enhancing technologies and their application to the NGI.

- ✓ the aim is to ensure that as sensors, objects, devices, AI-based algorithms, etc. are incorporated in our digital environment, that robust and easy to use technologies are developed to help users increase trust and achieve greater control when sharing their personal data, attributes and information.

Open Call priority topics (2)

Four priority areas provided a framework for the calls:

- ✓ Technical innovation in privacy enhancing technologies, such as crypto, federated identity, security and privacy for Internet of Things (IoT), distributed ledgers and privacy-enhancing data transports and data at rest,
- ✓ Ethical aspects, such as ways to use AI/ML/neural networks to serve the user's interests, legal and best practices for policy makers to consider, impact of profiling and mass surveillance,
- ✓ Bootstrapping trust at the protocol level, to maintain a decentralized Internet Infrastructure, for the establishment of trust, privacy (and security) between end-users and services,
- ✓ Ways for users to make more informed decisions on the relevance of information that they are asked to disclose when accessing services.

For each call specific areas of concern were identified by the advisory board

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NGI_Trust funds three types of third-party projects

Type 1 (viability)	Type 2 (execution)	Type 3 (transition to commercialisation)
Up to €75,000 per project from NGI_Trust, no matching funds required. The objective is to explore and assess the technical feasibility and/or commercial potential of a breakthrough innovation that aims at enhancing privacy and trust for the NGI. Activities can include conceptual development, risk assessment, market study or intellectual property management of a new technology or service, or a new application of existing technologies. Indicative duration: 6 months.	Type 2 (execution): up to €150,000 per project from NGI_Trust and matching funds of up to €75,000 (2/3 - 1/3 model). The objective is to fund R&D or technology development projects underpinned by a strategic plan and feasibility assessment (which can be, but need not be, developed through a Type 1 project funded by NGI_Trust). Indicative duration: 6-9 months.	up to €200,000 per project from NGI_Trust and the equivalent in matching funds (50/50). These projects should pursue the commercialisation of a privacy and trust enhancing innovation for the NGI (which can be, but need not be, developed through a Type 2 project funded by NGI_Trust). Indicative duration: up to 12 months.

Maximum award to any single third-party of €200,000 over lifetime of NGI_Trust.

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57 PROJECTS FUNDED
12 THEMATIC AREAS

BEYOND PASSWORDS

BETTER PRIVACY

SAFER BROWSING

USER CONTROL

IMPACT OF AI

HUMAN-CENTRIC INTERNET

STRONGER TOOLS

EFFECTIVE IDENTITY

PERSONAL DATA MANAGEMENT

DATA ETHICS

SECURING THE INTERNET OF THINGS

ADVANCING IDENTITY

Examples of project results

# Concept, objectives & contribution

The NGI_TRUST b.smart project pioneered the study of a mean to control privacy settings, enabling citizens to understand how much data is transmitted by connected devices, and to set reasonable privacy preferences With our co-creation practices, we were able to design valuable and highly interesting mean of propagation for a human centric interface, capable to guide IoT owners with the right amount of understanding and help during the propagation of privacy settings on new devices.

B.smart doesn't just takes the annoying task of propagating the privacy setting on new devices away it also helps user navigate and respond to the complex topic of privacy policies and standards for companies and devices thanks to an ecosystem of interconnected, yet independently working, series of touchpoint.
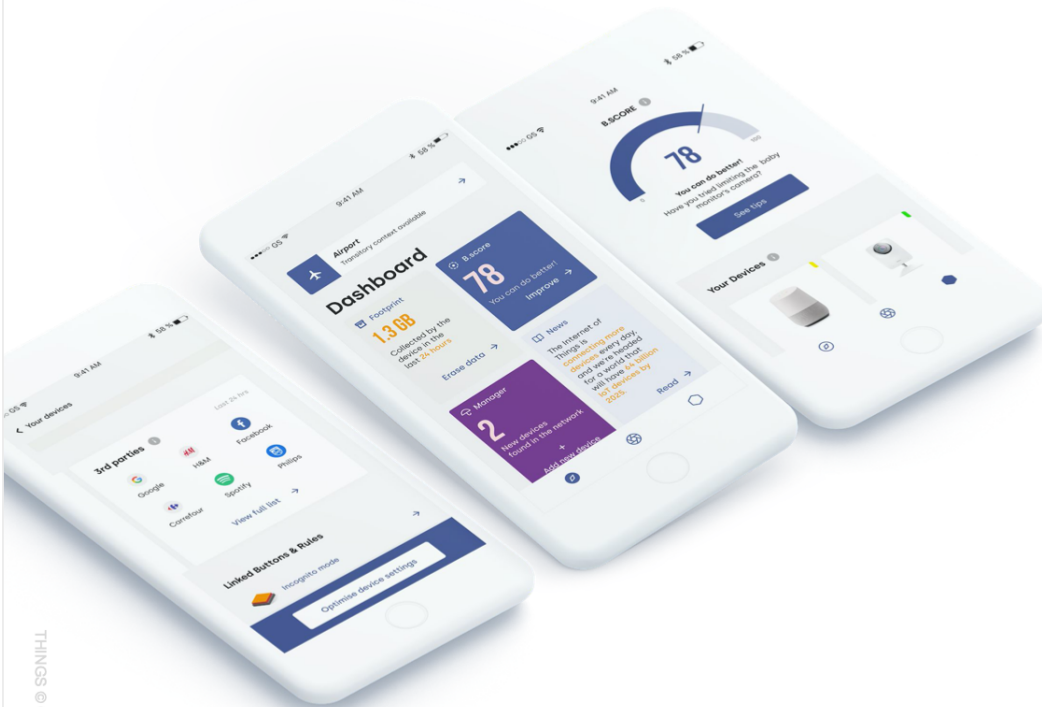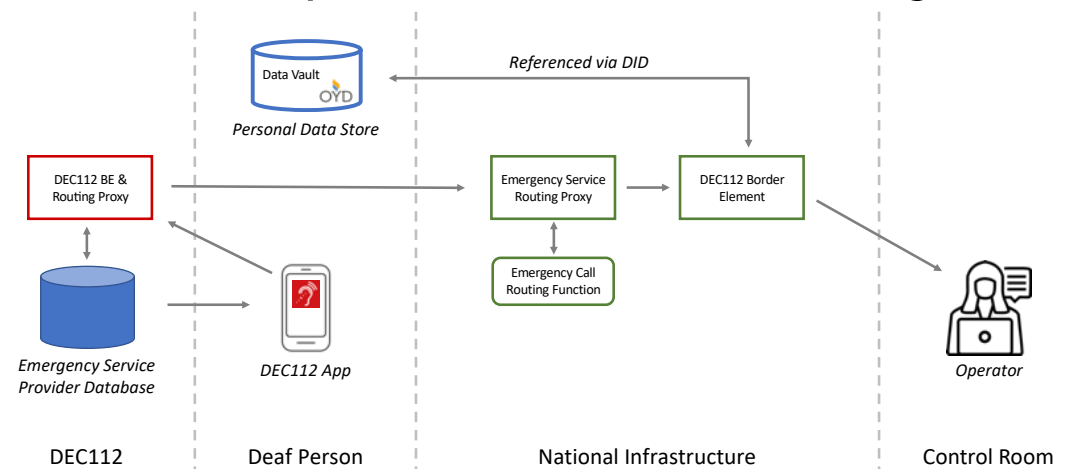
DEAF EMERGENCY CHAT AND TRAINING SYSTEM

Generating Training Data
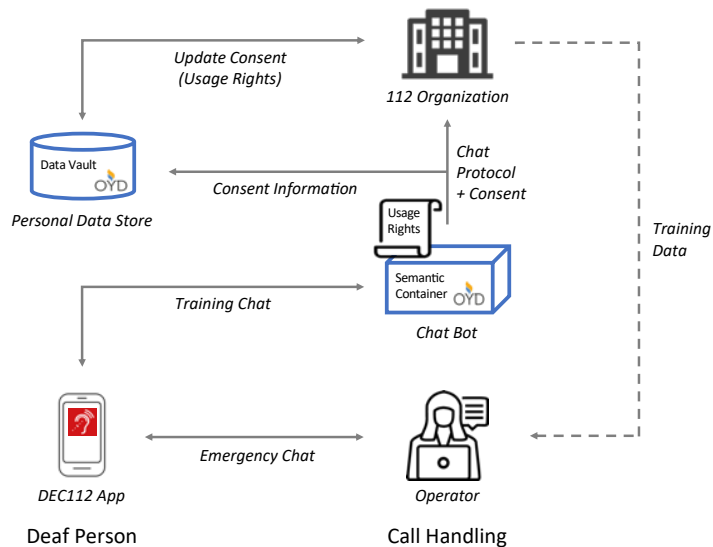
Purpose Based Data Sharing

Objectives
- Deploying consent management technology for sensitive data exchange
- Allowing purpose base data sharing during an emergency chat
- Rolling out the existing solution at the European level

Enhance Your Memories

Upscale and enhance your low-quality or old images and videos using artificial intelligence for a sharper and more detailed result.

Protect Your Privacy

Sensifai video/image enhancement app upscales your images/videos completely offline using the state-of-the-art deep-learning algorithm running on smartphone chipsets.

App Features

1.
On-Device App

The first video enhancement on-device app that improves the quality of your videos without internet connection and preserves your privacy.

2.
Video and Image

SensifAI uses a deep learning model to improve the quality of both your images and videos in three automatic, superresolution, and manual modes.

3.
Superresolution

Upscaling the resolution of your images/videos automatically without needing any effort from the user.

4.
Manual Improvement

Use the tools in the SensifAI app such as filters to change your images/videos to your liking.

NGI_Trust Technical coaching Activities (1/3)

Technical Coaching Framework

✓ Each funded project receives 3 technical coaching sessions

✓ 2 coaches per project from two different NGI_Trust partners

✓ Coaching sessions (mostly online, some in person) are about 60-90 minutes

✓ If possible the entire 3rd party project team should be present

✓ Focus on:
  ✓ IT security and privacy
  ✓ Socio-economic aspects
  ✓ Usability and user experience

✓ Technical Coaching is complemented and followed-up by:
  ✓ Business mentoring
  ✓ IP mentoring (e.g. open source and trademark strategy)

NGI_Trust Technical coaching Activities (2/3)

Technical Coaching – Goals

✓ Support project in navigating NGI_Trust and the NGI network and opportunities

✓ Explore possibilities of hybridization with solutions from other EU-funded projects or market products, especially open-source

✓ Accompany ... projects through concept validation and development process

✓ Assist in enabling ... a more market ready product through the incorporation of interdisciplinary expertise in the entirety of development

✓ Ensure the solutions being developed are innovative

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NGI_Trust Technical coaching Activities (3/3)

Interdisciplinary Development tool:
http://ngi-trust.iao.fraunhofer.de/

Business mentoring provided by NGI_Trust

1. BUSINESS MENTORING SESSIONS – CHARACTERISTICS:

- **STARTING POINT:** The projects request the service by writing to unai.calvar@tecnalia.com

- **NUMBER:** Up to four sessions with each project

- **DURATION:** Up to 2 hours per session

- **PARTICIPANTS:** NGI_Trust business mentor and representatives from projects (no limitation in number)

2. BUSINESS MENTORING SESSIONS – TWO POSSIBILITIES:

- Specific needs that the projects may have

- Value creation roadmap for the project

Although some general topics are suggested, mentors are flexible to satisfy the needs of each particular project.

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IP Mentoring support provided by NGI_TRUST

```
┌─────────────────────────────┐
│   Call 3 funded projects    │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│ Contact Raffaele Buompane   │
│ (EBN) or any other          │
│ NGI_TRUST project partner   │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│  Analysis of the IP         │
│  situation                  │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│ - Organisation of one-to-ones│
│ - participation to webinars │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│     Final assessment        │
└─────────────────────────────┘
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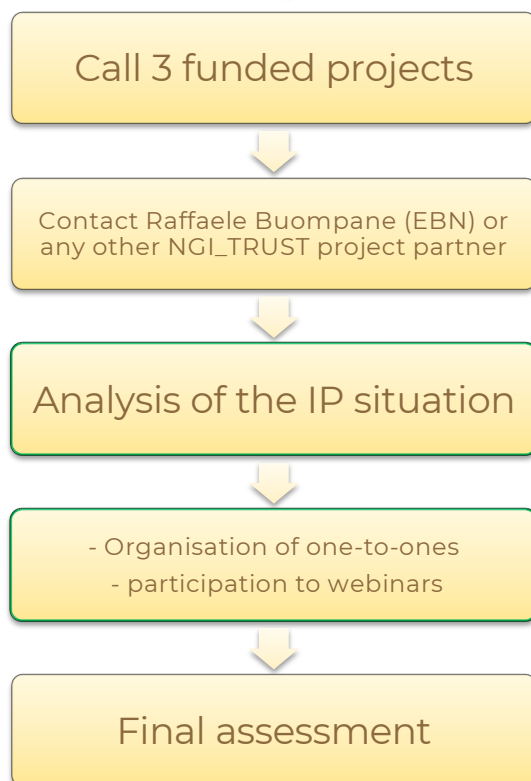
Characteristics of the IP mentoring action

- Complete customisation in response to the beneficiaries needs;
- Support available up to 4 times per project;
- Duration variable depending on each project's need (normally up to 2 hours for each session)
- Participation possible for project holders and projects' collaborators on a one-to-one basis;
- All IP subjects and problematics could be object of the mentoring, in particular for internet related business.

Characteristics of the IP Webinars

- To be organised ideally as a complement to the one-to-one mentoring support but also possible to address specific themes requested;
- In form of group meeting with no limit to the number of participants;

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IP Mentoring support provided by NGI_TRUST

For all projects:
o   max customisation
o   more direct contact with beneficiaries
o   variety of mentoring solutions available
o   Inclusion of IP marketing and IP business modelling notions
o   Use of case studies/best practises

For projects with IP already in force:

o   Focus mainly on Open Source themes
o   Focus on "filling the blanks"
o   To provide information about IP events of interest
o   To illustrate other extra EU IP systems

For projects with IP solutions to be provided:

o   To explain the huge importance of IP on a whole
o   To provide a more in depth analysis of the internally generated IP
o   To guide on the definition of IP priorities

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More information/contact us

- Project coordinator : Mr Alasdair Reid @ EFIS Centre - www.efiscentre.eu
- Email : NGI-Trust-support@lists.geant.org
- Twitter: @NgiTrust
- NGI_TRUST wiki : https://wiki.geant.org/display/NGITrust
- NGI.eu website : https://www.ngi.eu/about/

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