European
Commission

Next Generation Internet: Research priorities and funding opportunities

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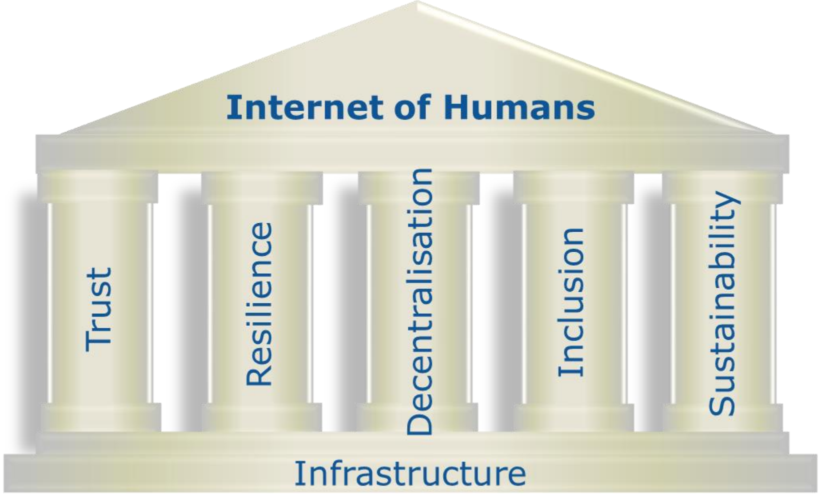
European Commission

NGI Vision

Develop key internet technologies in line with core EU values and societal expectations

- **Trust**: users control their data
- **Resilience**: secure and resilient infrastructure
- **Decentralisation**: Secure peer-to-peer transactions
- **Inclusion**: All take part in online society
- **Sustainability**: Reduced carbon footprint


Internet of Humans
Trust
Resilience
Decentralisation
Inclusion
Sustainability
Infrastructure

NGI: a 10 years investment plan

✓ **Horizon 2020**

- ❑ €250 million Commission investment in 2018-2020 on key internet technology areas, including blockchain, internet of things, social media, interactive technologies, multilingualism and accessibility

✓ **Involving internet innovators**

- ❑ €75 million to directly support internet innovators
- ❑ Equity-free grants to individual researchers, developers, start-ups, social innovators, makers
- ❑ Focusing on areas such as privacy, search, electronic identities or blockchain

✓ **Horizon Europe** (2021 to 2027)

- ❑ An intervention area in Horizon Europe, supporting the evolution of network technologies (5G/6G), internet infrastructures (Cloud, IoT) and applications

Unite stakeholders on a common goal: **an Internet of Humans**

Next Generation Internet in Horizon 2020

NGI Key Priority

- Interactive technologies
- Artificial intelligence
- Internet of things
- Future media - social media
- A multilingual NGI
- An inclusive NGI
- NGI - Open Internet initiative

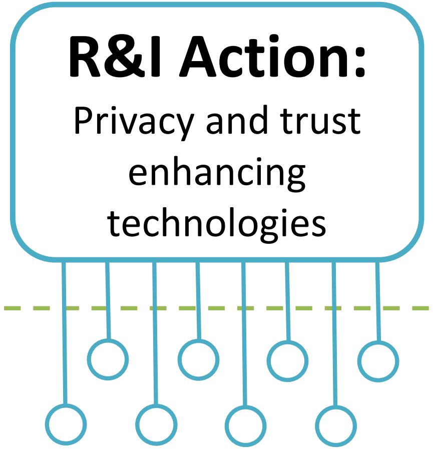
NGI - Open Internet initiative

- Focus on Internet innovators that do not normally participate in EC funded research
- Impact orientation: short research / validation cycles to quickly bring results to the market
- Cascading grants: agile programming, flexible implementation
- Supporting the human-centric Internet vision

R&I project implementation through sub-granting

Project submitted to EC call:

Run by organisations in the ecosystem
Leadership in the research area
Euro 7 million, 2-3 years,
80% for sub-grantees, pan-European
Procedures adapted to stakeholders



R&I Action:

Privacy and trust enhancing technologies

Activities include inter-alia:

- Definition of the calls for projects
- Attracting and selecting top-teams
- Monitoring
- Mentoring, Coaching, Sharing
- Community building

Sub-grantee:

- One legal entity with one specific project
- **Internet innovators: hi-tech startups and SMEs, researchers, developers, …**
- Carry out the R&I work
- 50.000 – 200.000 Euro, 9 – 12 month

What areas are we covering?

- *WP2018*
  - **Privacy and Trust enhancing technologies**
  - **Decentralized data governance**
  - **Discovery and identification technologies**

- *WP2019 (ddl 28th March 2019)*
  - **Strengthening internet trustworthiness with electronic identities**
  - **Service and data portability**
  - **Open Internet architecture renovation**

- *WP2020 (ddl January 2020): Blockchain for the Next Generation Internet*
  - **Advancing research on Blockchain and Distributed Ledger Technologies**
  - **Fostering trust in internet information exchange and content with blockchain**
  - **Bringing forward the emergence of collective intelligence on the internet**

NGI current research portfolio

***NGI0-PET*: address privacy concerns with bottom up approach; up to 50k€ (as first tranche); continuous call**

***NGI-TRUST*: use-case oriented; up to 200K€ (with co-funding); 3 fixed-ddl calls**

22.4M€ for innovators

***NGI0-Discovery*: same principles as NGI0-PET applied to discovery and identification technologies**

***LEDGER*: blockchains projects in selected verticals; up to 200K€; 2 fixed ddl calls**

Initial calls for innovators

- *First call:*
  - **156 applicants (36% SMEs, 33% individuals)**
  - **91 % never associated with H2020**
  - **52 selected (33% success rate)**
  - **TTC: +/- 2.5 months**
- *Second call:*
  - **132 applicants (41% SMEs, 30% individuals)**
  - **94% never associated with H2020**

Reaching untapped talents

Agility

Small is beautiful

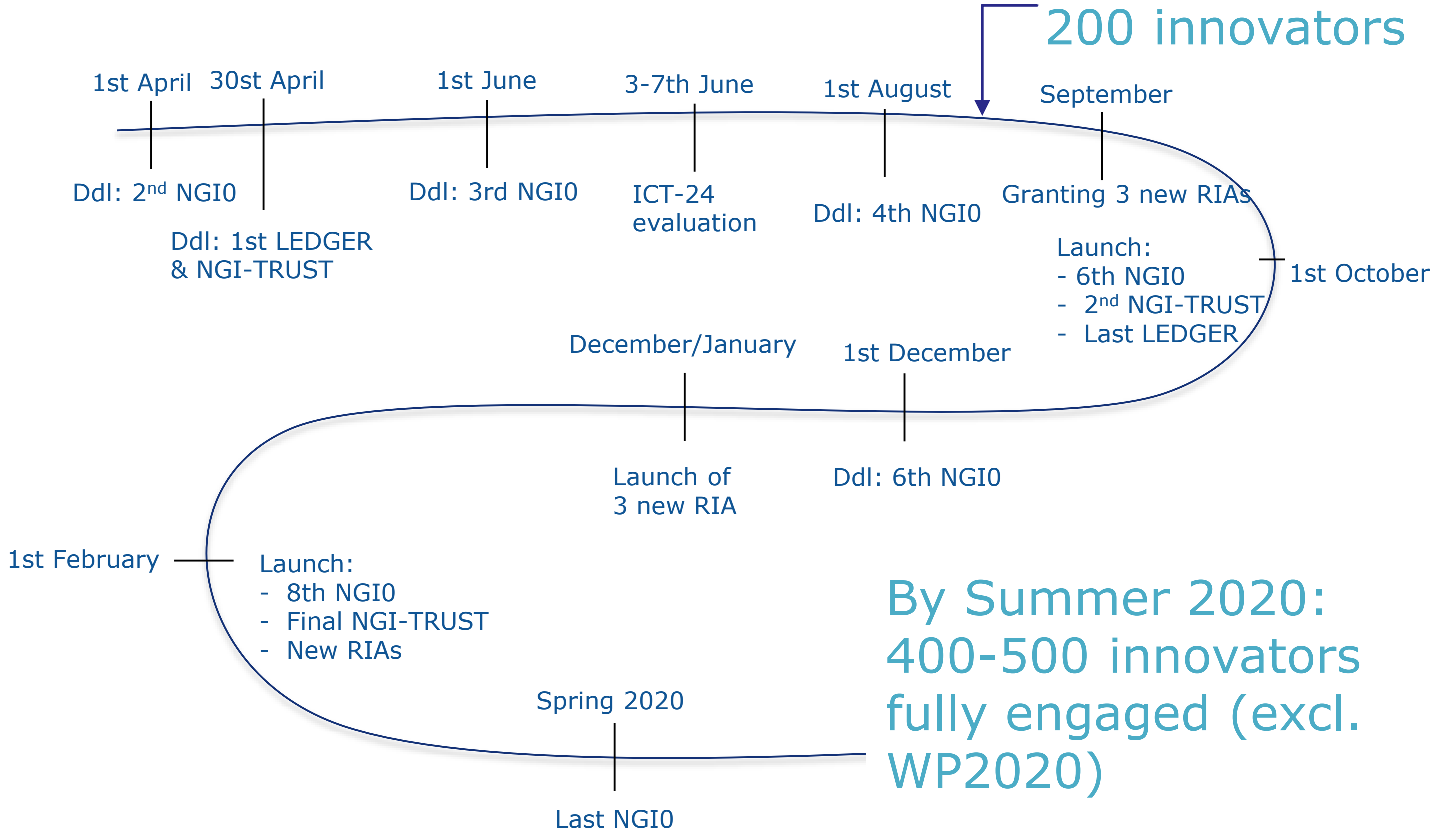
Simplicity

Scale

Mentoring

Complementary

18-month timeline (tentative plan)



Summer 2019
200 innovators

1st April
Ddl: 2nd NGI0

30st April
Ddl: 1st LEDGER
& NGI-TRUST

1st June
Ddl: 3rd NGI0

3-7th June
ICT-24
evaluation

1st August
Ddl: 4th NGI0

September
Granting 3 new RIAs

1st October
Launch:
- 6th NGI0
- 2nd NGI-TRUST
- Last LEDGER

1st December
Ddl: 6th NGI0

December/January
Launch of
3 new RIA

1st February
Launch:
- 8th NGI0
- Final NGI-TRUST
- New RIAs

Spring 2020
Last NGI0

By Summer 2020:
400-500 innovators
fully engaged (excl.
WP2020)

Join us in this exciting journey

https://www.ngi.eu

https://ec.europa.eu/digital-single-market/en/next-generation-internet-initiative

https://ec.europa.eu/research/participants/portal

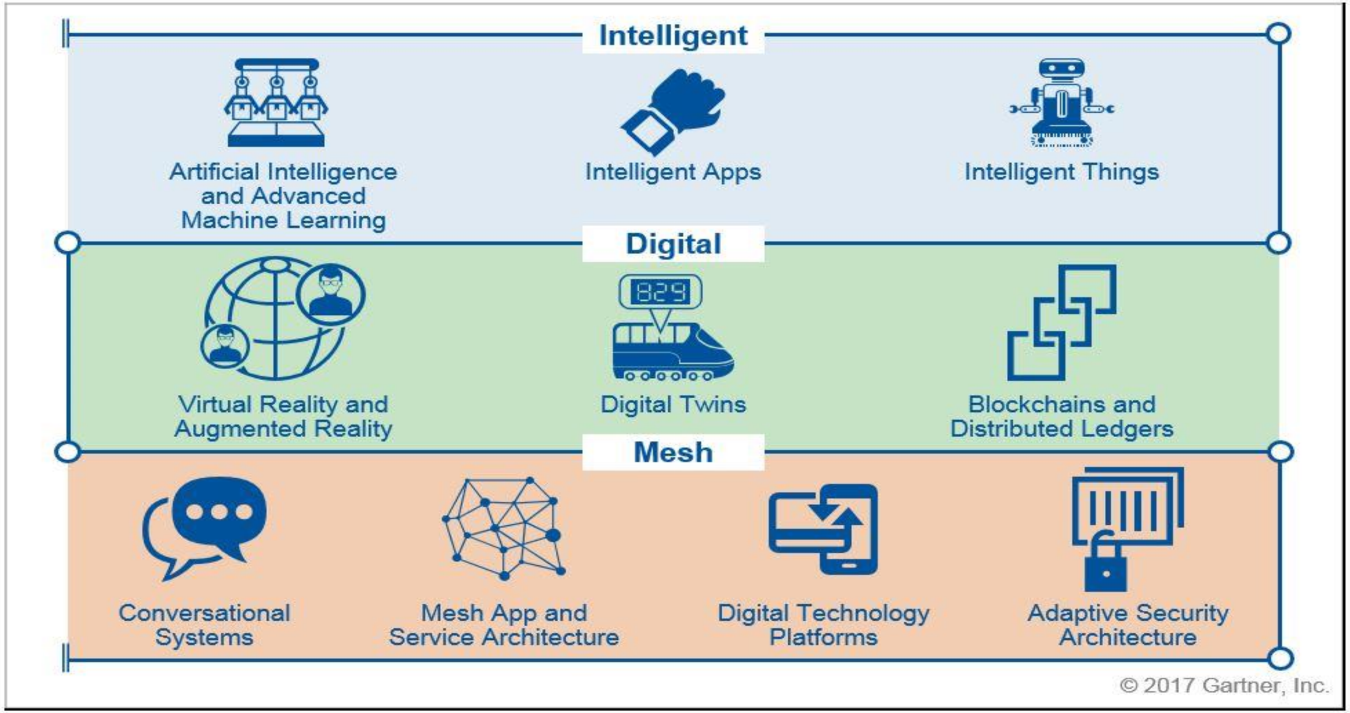
Next Generation Internet (NGI): Connected Objects and the Internet of Things

WP2020 Perspectives

IOT Week, 18/6/2019, Aarhus

Rolf Riemenschneider
Peter Wintlev-Jensen
Internet of Things
DG Communications Networks, Content and Technology
European Commission

NGI – Next generation IoT


Intelligent
Artificial Intelligence and Advanced Machine Learning
Intelligent Apps
Intelligent Things
Digital
Virtual Reality and Augmented Reality
829
Digital Twins
Blockchains and Distributed Ledgers
Mesh
Conversational Systems
Mesh App and Service Architecture
Digital Technology Platforms
Adaptive Security Architecture
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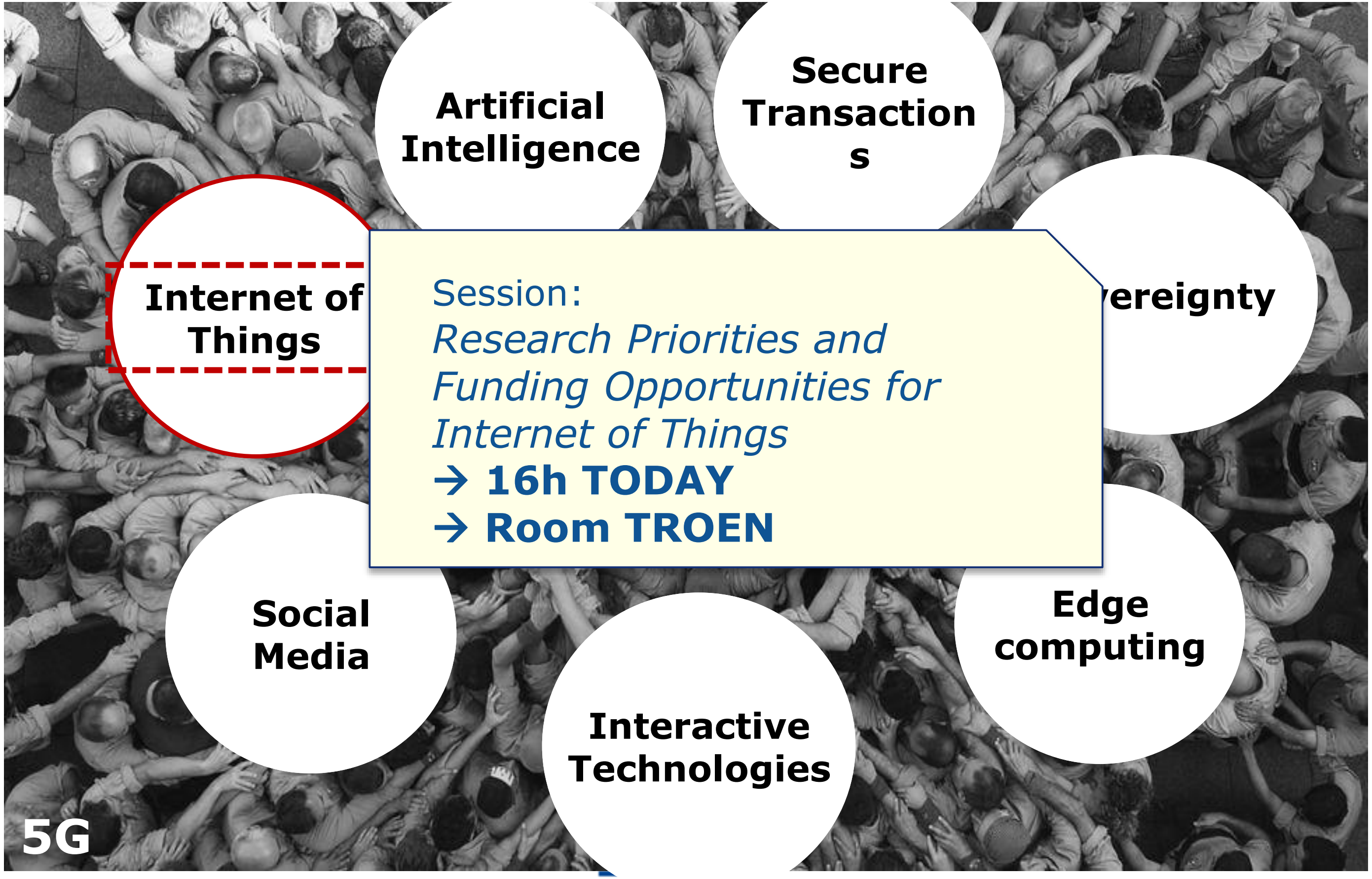
Source: NLnet & Gartner; Next Generation Internet study

→**Connecting a vast number of heterogeneous devices and**

→ **Foster privacy, data monetization and contractual arrangements**

Next Generation Internet – NGI



Artificial Intelligence

Secure Transactions

Internet of Things

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Social Media

Interactive Technologies

Edge computing

5G

Session:
Research Priorities and Funding Opportunities for Internet of Things
→ 16h TODAY
→ Room TROEN