

NEXT GENERATION INTERNET

BALANCING DECENTRALIZE D CENTRALIZED ICT-24

PRESENTER

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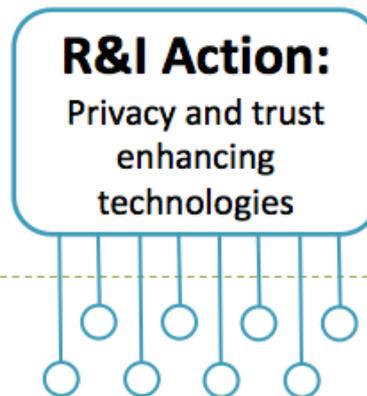
EVENT

OASC Connected Smart Cities Conference

Cascading funds

R&I project implementation through sub-granting

Project submitted to EC call:
Euro 7-7.5 mil, 2-3 years,
80% for sub-grantee
Pan European
Procedures adapted to stakeholders
Run by organisations in the ecosystem



Activities include inter-alia:

- Call for & selection of top-teams
- Monitoring
- Mentoring, Coaching, Sharing
- Communications
- Community building

Sub-grantee:

- One legal entity with one specific project
- **Young researchers from outstanding academics, hi-tech startups and SMEs**
- Carry out the R&I work
- 50.000 – 200.000 Euro, 9 – 12 month



Vision for a "Next Generation Internet" an Open Internet initiative

INTERNET



Concerns
Vision
Research topics



NGI Next Generation Internet Research areas

- a) **Privacy and trust enhancing technologies:** to help users achieve greater control when sharing their personal data

- b) **Decentralized data governance:** explore new distributed data management systems based on P2P and Blockchains, paying attention to ethical, legal and privacy issues

- c) **Discovery and identification technologies:** to access heterogeneous data sources, services, objects and sensors, devices, content, etc.

EIC Prize on "Blockchains for Social Good"

15/12: Official Launch at NESTA Italia, Turin

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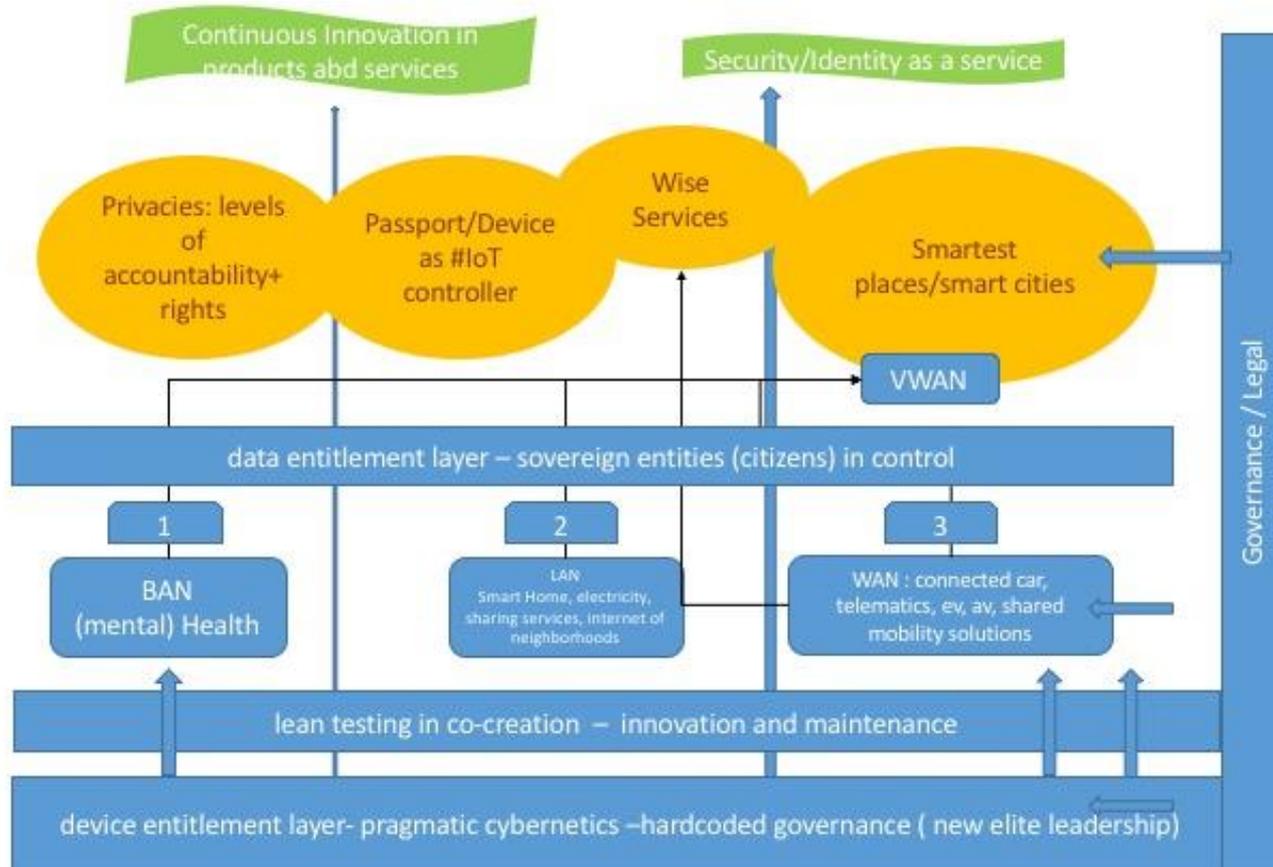
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European Commission DG Connect - "Next-Generation Internet

www.BC4socialgood.eu

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-eic_en.pdf





NGI MOVE: Starting a conversation on pragmatic cybernetics



SALONS, MEETUPS, CO-CREATION WORKSHOPS

With the threat of geopolitical instability coming from several dimensions, Europe needs to not just assert its global presence, but moreover needs to assert its digital sovereignty to further its vision of a single digital market, its values and a European cloud.

The analogue drivers that build societies' tools are no longer tuned to the reality of today that is more hybrid, defined as interplay between analogue and digital. René Thom, the mathematician, says that "each creation and destruction of forms, or morphogenesis, can be described as the disappearance of the attractors that determined the forms that were current, and the replacement of those by capturing of the attractors that represent the eventual forms". The forms will not disappear before the attractors that give them their shape have lost their glamour. In the shift from competition in verticals to collaboration in ecosystems, we are seeing new business models, new forms of cooperation, new forms of social sharing, cultural expression and economic co-opetition.

We see the rise of extremely cheap hardware, open software, database storage and analytics, DIY low-power long range wireless communication systems, blockchain projects from tracking tuna to new banking systems. Slowly the attractors building the KPIs, the success factors for the old situation, are fading out.

But a new configuration as a system is not yet in place.

We aim to not only find *but co-create the new attractors that will bring about the new forms*. Harnessing these new forms as Next Generation Internet will be the biggest challenge for Europe after the creation of the EU itself and the euro as the data-flow in NGI is *realtime* and will engender new entities consisting of different qualities.

Thom, René. Structural Stability and Morphogenesis, The Mathematical Gazette Vol. 61, No. 416 (Jun., 1977), pp. 141-144



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SALONS, MEETUPS, CO-CREATION WORKSHOPS

Reciprocity is the core principle that defines our actions. The lack of reciprocity in tcp/ip (pass on the packet) and html/www (pass on the link) has created its ubiquitous success, but at the same time it has fuelled the need for a Next Generation Internet, one in which security is a service by default, data-lakes are under multi-stakeholder control, algorithmic transparency is realized and self-healing qualities of networks are matched with local repairability in order to make them sustainable.

Considering the international synergies and efforts needed to establish such a network, we feel we only have one chance, after which we can only do updates of the system that will emerge as the new standard. We believe we should focus on what Europe is good at, leading with 19% in Photonics and 30% in Embedded Systems in worldwide production.

Yet, while Europe is world leader in many industrial sectors, European companies face difficulties with transforming their businesses to the pace of digital innovation, according to Szabolcs Szekacs (DG Internal Market, Industry, Entrepreneurship and SMEs). Therefore, our focus also lies in creating an ecosystem to fuel a Movement of Digital Transformation; an *organizational change* to better facilitate and co-create solutions to the needs of citizens, business, and governance, not fronting technological problems solving the problems of technology.



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