



Next Generation Internet

Fields marked with * are mandatory.

The context

The Net Futures directorate aims to pioneer and coordinate research, innovation, and policy initiatives on what lies beyond the current Internet architecture, software and services.

Therefore it is updating its vision for the area, identifying key technological challenges and research priorities, and establishing a research and innovation agenda for the coming years.

Europe is lagging behind in digital and has to catch up. In spite of the openness of the internet protocols and the availability of other open standards some key elements of internet are today dominated by commercial proprietary solutions that act as gatekeepers. The strong network effect that proprietary systems create impedes de facto the emergence of alternative solutions.

The only sustainable long term response is through technology development. Europe needs to reach critical mass in investing in the next generation internet.

A number of initiatives are running under H2020 that are relevant in this context. They are often driven by industry players or are focused on pre-determined aspects such as e-Health, big data, or Internet of Things. A key success element for this reflection is to leave the innovation space open and to enable the scientific and entrepreneur community to lead in order to allow the most disruptive ideas.

A fresh approach is needed without necessarily taking into account the current activities supported. The approach taken deals with the Research & Innovation activities that should be done at EU level to define a "Next Generation Internet" (working title), with a time horizon of a decade from now. Experts are invited to look at expected functionalities and building blocks of the Internet of 2025 and and at the conditions to make them open.

We are asking to provide your input either by answering to the set of the below questions or by uploading a 1-2 pager.

The results will be made available in the form of a report made publicly available.

We would appreciate to receive a **draft contribution** before the **14/03/2016**.

The **deadline** for the survey is set to **10/04/2016**

If you have questions you can send an email CNECT-E-NEXTGEN@ec.europa.eu

About yourself

You are asked to identify yourself and provide concrete indication of your expertise, but the contributions will be kept anonymous unless you request otherwise.

*Your Name

*Please fill your email.

*Your occupation and expertise

Status of the Internet in 2016

What is your assessment of the current status of the Internet and its impact from a European perspective ? What are the major trends ?

How important are issues like Net Neutrality, de facto standardisation, broadband access, European Research Networks? What are the major trends in Internet usage and their impact on infrastructure and business models?

View towards 2025 and beyond

Below are the set of questions we would like you to provide your views on. If you prefer, you can answer them by uploading in free-form a document of max. 2 pages.

How do you think the internet will look like in 2025 and beyond?

Use relevant keywords to describe it.

What will be the essential functional building blocks of the Internet then?

Below are example of aspects to consider and possible challenges. Please consider them just as indicative.

On infrastructure/networks:

What will be the major requirements and challenges, as well as costs, in terms of infrastructure?

On functionalities/building-blocks:What are the major technology gaps and how could Europe capitalize on these challenges? What major research areas/topics do you envision here?

On access to information:

What are the major technology barriers in terms of open, generalized access to information? What mechanisms could be envisioned to help find the right information (including from sensors and actuators – IoT) when you need it?

On applications:

What are the major issues and challenges in terms of application development and subsequent scaling-up in view towards generating global players? How could this be addressed beyond providing appropriate financing?

On user involvement:

How can we best involve end-users in designing everything from functionalities to applications with a view to optimizing Quality of Experience and facilitating personalisation?

Could you indicate where we should focus our activity research in the next 5-10 years to achieve? Are there new field of research to create/develop?

Prioritize the major research focus areas identified above in the short (18-20), medium (20-25) and long-term (>25). Highlight any potential disruptive areas.

You can upload a document as your contribution or to complement the above (Max 2 pages).

Please do not hesitate to submit any additional supporting documents directly to CNECT-E-NEXTGEN@ec.europa.eu with the Subject: Supporting Documents.