

# Digital Futures

# **Workshop report**

25 APRIL, 2012

First Core Foresight Workshop "Future and Present Snapshots"



On 29-30 March 2012, 60 people gathered in Brussels in a workshop to kick-off a process of visioning how Europe may look in 2050.

#### Introduction

The European Commission's Directorate-General for Information Society and Media (DG INFSO) is organising a series of events in the context of "Digital Futures", a visioning project to prepare DG INFSO for reflections on ICT policies beyond 2020. The designed exercise is to be highly participatory, incrementally drawing in people through both face-to-face and online engagement around a collective inquiry into the future.

This report gives an overview of the messages emerged during the first workshop that took place on 29-30 March in Brussels, the format of the event, the experience of the participants, as well as the next steps. A comprehensive report on the visions and trends contributed by the participants will be released in May 2012.

## Setting the scene

Robert Madelin, Director-General DG INFSO, opened the day by setting the context.

"We are really pleased that you have accepted to join our journey into the future. We are starting a new initiative that we all hope will deliver inspiring ideas for a future that fits with the expectations of all Europeans."

"We are not aiming for a 'predict and control' approach to the future. Between now and 2050, there are many different points at which uncertainty can arise."

"Our visions may be related to, or differ from, what the rest of the world thinks. But it is a process that we would like to share with others around the globe."

"This is a modest beginning on a journey which we hope will be very open and very participatory. It will involve people both like us and not like us. In a way, we are all guinea pigs at the start of a long

experimental and agile process that will deliver inspiring ideas for future policies."



I wish you fun, and also appeal to you to continue to be part of our conversations and to engage more and more thinkers."

### Building a lab together

Franco Accordino, who heads up the Digital Futures task force, introduced the idea of becoming more nimble about policy making. "ICT has an enormous potential to facilitate the way policies are designed and implemented."

Right now, we know that by 2020 we want to reduce our carbon footprint by 20% or contribute to increase people's active and healthy life by 2 years. But what kinds of targets do we want to set beyond 2020?"

"It is really important to ask what kinds of policies can be developed in these next years, and to do it in a very agile and participatory way. We aim to generate evidence and facilitate collective wisdom so as we can better anticipate and be more proactive rather than reactive to the emergent global transformations."



#### Process for the day

The approach used to harness and amplify the collective intelligence of the experts gathered in the workshop is known as 'the art of hosting conversations that matter'.

The two days of conversation opened around the question: "Who are we, and why is it important that we are enquiring into Digital Futures together?".

Then, a series of strategic conversations ensured that the fruits of each reflection fed into the next. Each phase of the process was designed to harness the knowledge of everyone present and encourage the shared imagination of potential futures. Key questions included:

What do we imagine life in Europe to be like in 2050? What are the digital futures we imagine will allow us to co-create relevant and adaptable policies for Europe – with citizens, member states, sectors, regions, Europe wide?

The process was designed so that the essence of what was happening in the room was continually reflected back to the group as the work progressed.

### Who showed up and why

Participants were invited through a DG INFSO internal call for contributors, where every staff member could propose names. Sixty contributors accepted the invitation and showed up to an inspiring two days of intense and productive interaction.

The attendees were mostly European. Nationalities included Belgian, British, Danish, Finnish, French, German, Greek, Hungarian, Italian, Romanian, Spanish and Swedish. Among the countries of origin were also Brazil, Canada, China, Japan, and the United States of America. Most attendees were male; only about one-fifth of the participants were female — an imbalance that was duly noted.

Technology and society were of keen concern to everyone. In terms of technology – interests covered artificial intelligence, databases, information management, interfaces, medical technology, personalised health and safety, and systems' security. In terms of society, people were passionate about creativity, democracy, education, environmentalism, human rights, and values.

People were very motivated to enquire into Digital Futures. Most expressed a desire to listen and to learn. Some wanted to co-shape the future and instigate change. Others especially wanted to see the future from the viewpoints of either young children or older – and indeed much older – adults.

Other important motivations included what messages people could bring from or take back to their own place of work, teaching, research or study. Meeting people of like minds was important. Some especially were seeking to overcome a perceived degree of pessimism about the future.



Mostly, the messages about Digital Futures are that:

- The future is not fixed, just as our lives are not fixed.
- It is all about shaking minds, sharing ideas, shaping the future!

### Visions – Illuminating our Current Collective Knowledge

First, the workshop visited a future that is 38 years ahead of us. We woke and entered an environment in which we could be of any age we chose, but which we were to experience as though we were living our day-to-day concerns.



Several rounds of "world café" sessions took place in small and large groups to discuss our mutual visions of a 2050 future.

Take, for example, a vision of 2050 in which technologies are usable by absolutely everyone, no-one is left out – "ICT is usable by all".

That technology will be fully and easily usable in 2050 will be very important because ICT will be used for education, employment, health and travel, and more! By 2050, there will be few or no public and private services that do not require the use of ICT. Key characteristics of the technologies will include access, awareness, individual needs, instant remote access, interfaces, invisibility, and ubiquity.

All these kinds of people can use ICT:

- Young people.
- Old people.
- People with disabilities.
- People are who non-technical or who have no technical experience.
- People who dislike complexity.
- People who either hate technology or fear it.
- People who cannot read the language on the device.

A 'World Café' is a brainstorming technique of collaborative dialogues to foster interaction around questions that really matter in real life.

# Exploring and unfolding current trends

In the workshop, we then looked back to the year 2012. Our assignment was to see what trends are in place or are already emerging. In several cases, some of the trends present a utopian view of 2050 as well as of 2012. In an opposite sense, dystopian views of both time-periods can also be observed. Attendees tended to hold more positive views of the more distant future than of many contemporary and near-future experiences.



The overall tendencies that were identified tended to colour the year 2012 as experiencing: an appetite for risk; climate change leading to new geography; more and more control; depletion, decline, decay; peace that cannot be taken for granted; the peak of the oil boom; a tremendous increase in augmented reality; and, ultimately, the challenge of how to integrate ethics into technological development.

The group worked to identify which of the developments would have the most impact, are the most likely, and are also the most desirable. Here is an indication of the top five or six issues in each category:

#### Impactful

- Harmonisation towards human machine integration.
- Participative democracy.
- Privacy and the right to be forgotten.

- Data, and how it is collected and processed.
- Education.
- Smart life.

#### Likely

- Invisible technology.
- Data and how it is collected and processed.
- How do we innovate better
- Individualised education.
- Inequality, we cannot buy our way out.

#### Desirable

- New models of democracy.
- Values for a balanced future.
- Balance, harmony, use of resources.
- The desire for empathy.
- Smart life.
- Work will not change.

Several of the directions seen as having high impact were also thought to be highly likely. Examples include the shifts towards human-machine integration and invisible technologies, changes towards a more individualised form of education, and the ways in which data are collected and processed.

Prospects seen as being of high impact and, indeed, even highly likely were not necessarily those described as the most desirable. Some examples that reflect these idiosyncrasies include the high impact and likelihood of ICT that merge human-machine interaction and/or are invisible, but the very low level of desirability of invisible technologies. In terms of societal trends, new models of democracy or participative democracy were seen to have high impact and be highly desirable, yet neither was considered to be highly likely.



Those elements which were seen as the most desirable reflect fundamentally many of the most basic, common and shared of values: balance, democracy, empathy and harmony.

# Getting specific: Ritual Dissent and Assent

The exercise of ritual dissent enables people to examine what connections there are among the visions, but also to see what is missing and what gaps exist. The diversity of the feedback received can really enrich these "baby ideas".

The ideas carriers moved from group to group. They listened carefully to the groups that they met, and built on the feedback they got from others.

The mass of the constructive criticism received focused around three of the six core categories of ideas: economic, social and political. For example:

- Markets that concentrate on emotions and the sale of emotions.
- Geo-politics between the east and the west, and who sits between the two?
- Traditional authorities losing power.



However, more than this, some new areas of thought arose, which to date had not been placed into concrete categories.

Some of the observations were environmental.

- Biosphere and the technological fix.
- Scarcity of resources.

There were many additional observations that related to cultural, educational, and societal views.

- Do [things] small and early, and learn.
- New family models.
- Participation initiatives.

There were many issues that, rather than simply being economic, related to business and/or the market, or were organisational in nature.

Last but not least, there were items missing that relate to spirituality and values.

- A "vote" from heaven.
- The "risky" influence of religion.
- Integrity of the human physical identity which might be harmed by technology.

This exercise shows that people are fully prepared to share with each other, and have plenty of good ideas. They saw that major challenges, for example, demographic and environmental, are facing us. Organisationally and/or politically, however, we spotted that we may need to recapture the ability and competences to work together

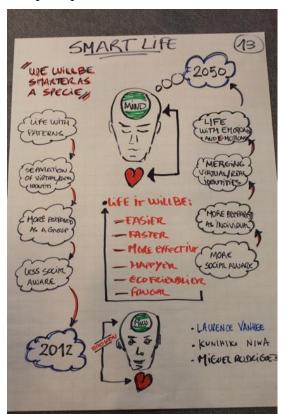
with each other more closely in decisioninfluencing and decision- making groups. And we may need to touch base with our common and shared human values.

# Handing over from one day to the next

At the end of the first day, we were encouraged to share reflections on what had surprised, shocked or excited us.

There were some concerns about:

- "Black swans" and "black bears" (ranging from the really unexpected and unforeseeable to the more common and growing challenges).
- A trend towards increasingly short term focus: if we become short-term, we will never be able to address the challenges quickly.
- The potential loss of the precautionary principle



They were counterbalanced by desires to:

- Make more space and time to understand more and explore shared meanings among people.
- Make a better world for our children because that is why we are here.

Overall, we were cheered by:

- A renewed confidence in the resilience of human beings.
- An eagerness to see what 2050 will look like when we get there.

By the end of the first day, therefore, we knew and understood that we predict the future by shaping it. We had found our common ground and, figuratively, invited our children, and the future generations, into the room.

The second day started by capturing the flavour of the main trends, and seeding the directions of the day to come. Given the gender balance in the room, the two 'harvesters' (who had been capturing the proceedings in different ways) stepped up to comment on what they had observed on the previous day, not only as witnesses of the event, but also, explicitly, as women:

"Social innovation is as important as technological innovation. Everyone has been sitting quite naturally and informally in a circle inside the official set-up.



# Visioning Digital Future scenarios

In this part of the workshop, participants were invited to call out a session they were interested in facilitating, using an 'Open Space' process. The focus was to be on the important visions that we had for the year 2050.

The process produced over 20 sessions, exploring one or more specific areas, and the main elements that led to the vision, the underpinning trends, and who shared in the vision were all described (see box below).

A pearl of wisdom was drawn from each vision to attract people's attention. A small sample of these pearls gives a sense of the sometimes utopian, sometimes dystopian potential futures that were evoked. The challenges are enormous:

- In 2050, we are robots, we have nano robots inside our bodies; we are cyber robots 2.0, our skills inherited by children; these genetics evolutionary. In 2050, what will society tolerate when knowledge can be extracted from the brain and we can be immortal, when we have the possibility to experience as many lifetimes as we want, and when we can insert preexisting knowledge into newborn children?
- In 2050, human beings are the smartest species in the world – they are the emotional ones, smarter as a result of

- their awareness of the social problems that have to be faced.
- In 2050, wholeness, of whatever variety, is about being able to access all of our talents and all of our personalities.
- In 2050, altruism is in our self-interest! We have redefined our close relations and families. We are all working together on a kind of virtual digital ethnography: humanists, social scientists, technologists.

# Exploring the shaping of our future together

In the afternoon of this second day, 12 'ProAction café' work groups explored together how to shape the immediate future. Each group was 'hosted' by a volunteer who had been inspired to champion a topic that interested them from among those that had emerged during the morning's sessions.

Some topics related to societal purpose, with a focus on participatory democracy and full inclusion. Others focused on the social and organisational processes themselves. Several had a largely technological orientation, such as the use of data, and a shift towards cyborgs and robots:



Society enhanced by technologies

- Achieving ICT that adapts to all users by 2050 (whether young, old, tech, nontech).
- Promote examples of ICT for societal acceptance.
- Smart urban environments (S.U.E). Participatory initiatives
- Digital Enlightenment: How can Europe bring its best to the world?
- Harvesting our Digital Futures: Can you help?
- How can participatory democracy exercise real power? Create a democratic revolution.
- How can we promote inclusion of disabled people?
- Participation in multi-stakeholder processes.

Technologies

- Define visions for data visualisation until 2050.
- Human to cyborg vision.
- Visions to develop ICT and robotics based services.
- Visions to make use of all data.

After three rounds of conversation (during which the composition of the groups changed) each workshop leader reported in plenary session on the very first steps that could be made towards making each idea materialise in the immediate future, and the actions that each had committed to taking. For example, the session called "Harvesting our Digital Futures" explored how to maintain an accessible and constructive record of all these Digital Futures events and activities. It was decided to ask the whole community of participants to:

- Help with gathering together materials.
- Make sense of and interpret the two days of findings (and more).
- Expand, enhance and share the harvesting process as we move forward.

### Closing the day

This first workshop had encouraged a first grouping of people to explore Digital Futures together. We had met, bonded, and created together. We had met and shared huge number of creative ideas with each other. We had travelled together in a kind of time machine to the middle of this 21st century. Then, we began to see what might make for the influences on our nearer future. Focusing on a much smaller list of next, important steps, people started to make plans for how we will interact in the future and how we will transform initial, small ideas into something much more concrete.

The day was wrapped up with a large circle in which everyone shared with each other what the workshop had meant to them and what had struck them the most.

There was a considerable sense of transformation, and of people feeling themselves having been made human again. So keen were people to continue the dialogue and associations with each other that they had great difficulty in leaving the room!

Visioning Digital Future scenarios: A summary

- Climate, demography, immigrations, avoiding nationalism, populism and closing gates. Geopolitics. Global equilibrium.
- Free public education libraries. What is the new school going to be like?
- Harmony and balance in life, without depleting resources and the overall environment. Exploring human empathy and gentleness. How can we develop both our typically feminine and masculine sides, cooperation and competition?
- How to innovate better.
- Individuals living in alienation and isolation (virtual worlds, robots). Robots, human life and domotics.
- Immortality in a virtual world. The role of 'man' after the singularity.
- Invisible technology. Millions of sensors and bits of data. The Internet with Things. The Internet of people.
- The limits of representative democracy. "Harvesting the collective wisdom of the people". Technologies and those who can use them.
- Smart spaces and smart thinking. Cities and rural areas.
- Well-being and health. Health and disabilities. No more poverty or illnesses that can be prevented.
- What is work like in 2050? What is the factory like? Production and construction. Marketing 2050.
- Reinventing the welfare state for 2050. What new economic models, competition, cooperation, global, local, and governments are needed?
- What values should we have in 2050? Privacy is an issue for the future. After Pollyannaism. What will not change (such as a mountain I like)? Spiritual life in 2050



Hugely challenging directions were explored during the two days of intense activity. One possible 2050s future can be seen that comes after the singularity, in a world characterised by the Internet of Things and the use of robots, and is populated by transhuman beings.

However, yet another is one in which cyborgs are turned back into human beings or in fact never become cyborgs! That 2050s future is one that is firmly grounded in democracy, health, inclusiveness and involvement: it is highly interactive and participative in a social sense, fully civilised and convivial.

## Next steps

The workshop of 29-30 March was not a one-off event.

An online event is planned for 29 May to further engage around the visions, analyse the challenges and opportunities stemming from them and assess them on the basis of their likelihood, desirability and impacts. A third workshop on 5-6 July focusing on the policy options will conclude this preliminary phase of the initiative.

A first draft release of the visions and policy options is due by the end of October 2012, the second release by May 2013. The final version will be presented and debated at a closing conference in Brussels in October 2013. The challenge will be to engage more and more contributors throughout the various phases of the initiative.

Work also has to be done to compare and contrast, and aim to merge in some way similar visioning work that has also been taking place in-house among the staff of DG INFSO.

# Getting involved

Digital Futures will soon launch an online participatory lab to engage all who wish to participate in shaping the visions and trends further and in identifying the policy options to be offered as inspiring ideas for the Commission's next policy framework.

This online engagement platform, to be codeveloped with its users, will enable the coelaboration of ideas from this workshop and beyond. For the time being, the project's basic web presence is at:

http://ec.europa.eu/information society/digital futures/index en.htm