

1st Dialogue on "Platforms For Collective Awareness And Action"

Brussels, 9 September 2011, European Commission

ICT BUILDING RESILIENCE WITHIN SOCIETIES

Session chaired by **Robert Madelin**, Director General, DG INFSO, European Commission.

Report by **Fabrizio Sestini**, Scientific Officer of the Paradiso project, DG INFSO, European Commission. (report available at http://ec.europa.eu/information_society/activities/collectiveawareness/)

Robert Madelin set the ground for the session by introducing the emerging concept of platforms for collective awareness, meant to create an extended awareness of the environment and of the consequences of our actions, to take informed and sustainability-aware decisions. This approach is based on the assumption that ICT systems must help us to progress towards sustainability (a beyond-GDP, low carbon economy), use self-regulation, in a lightly coordinated bottom-up approach, without being commercially-driven. The possible applications would range from informing consumer decisions to prompting behavioural changes towards more sustainable lifestyles, enabling communities of peers to access real-time information and simulations of the environment, and anticipating social changes and social innovations. A possible framework for developing these actions would include the development of pilots of such platforms, based on models of the real world and on innovative trust mechanisms, and a truly multidisciplinary understanding of the underlying socio-technological aspects. He then invited the panel to discuss several open questions concerning the need and modalities for a possible implementation of such a framework for future research.

The keynote speech was given by **Geoff Mulgan**, Chief Executive of NESTA, the UK National Endowment for Science and Arts, and focused on collaborative platforms, resilience and collective intelligence. He gave several examples of platforms which attempt to collect and integrate information, in order to allow better planning and decisions (e.g. "who owns my neighbourhood"), also integrating peer information (e.g. "action for happiness" or "challenge.gov"). However, he remarked that all these examples are still only **scratching the surface**, as they are only weakly linked to decision-making structures: they collect huge amounts of data, but produce little evidence of **wisdom**. Wisdom which, instead, would produce the expected resilience, the collective bee-like intelligence which is needed for coping with shocks and making society a better place to live in (bees are seen as unintelligent creatures living in an intelligent society, humans just as the opposite). This would allow a better management of resources (e.g. money, housing), capacities (e.g. skills) and relationships (e.g. network, trust). He criticised the current approaches to "wisdom of the crowds", which have elements of truth but are too much centred on technology and need to be **more integrated with real humans, real relationships and real policies and institutions**. He envisages moving to higher levels of collective intelligence where technology is just a means and not an end: just helping people make the "right act" also the "easy act".

Jack Jacometti, former Vice-President Future Fuels & CO2 at Shell Int., presented a realistic -if scary- scenario of **global resource security issues**, grounded also on gloomy forecasts from military and security organisations. We need a radical reduction in demand of natural resources to achieve a sustainable system, as technology-based optimisations alone can only address a part of the growing demand. The main challenge for him is **how to transform individual and collective behaviours** to shape a more sustainable society, and the way forward needs information networks which are able of creating this level of **situational**

awareness, in both centralised and grassroots approaches. These platforms for collective awareness and action would be a key enabler to build resilience and trust in communities in the face of potential shocks, as they would ease the "I will if you will" stalemate.

Paul Timmers, Director of "ICT addressing societal challenges" at DG INFSO, presented how the ICT program is helping to build resilience through **user empowerment**, for instance in energy, mobility, governments services, technology design, quality of care, education and working patterns. The principles are **making more for less**, in usage of resources like energy or rare earths, and **making sense of data**, for intelligent transport or for territorial development. He mentioned a few concrete examples of electronic participation tools in local communities, and the BeAware project boosting energy awareness with wireless sensors and gaming scenarios among participants.

Peter Madden, Chief Executive of the Forum for the Future, touched on several aspects relevant to platforms for collective awareness and action. He criticised the current approaches for the development of a future internet, as they are too much oriented to technologies and too much driven by the quest for increased efficiency, which does not reduce consumption but on the contrary introduces additional strains. He advocated that new technologies should be designed instead **to increase human resilience**, and to reduce our environmental footprint, including that of technology itself.

Cristiano Codagnone, Senior Scientist at JRC / IPTS, presented examples of how ICT can build resilience within societies, by **nudging lifestyles for better health outcomes**. This is based on community based **crowdsourcing** of health data from individuals, **live epidemiology** to analyse occurrences in real time defining predictive models, and on **persuasive technologies** to spur behavioural changes through personalised feedback. He made examples of how social networks can be leveraged to fight obesity or other problems, which would contribute to developing resilience in key health aspects.

Finally, **Angela Hariche**, Project manager of Wikigender and Wikiprogress at OECD, described their approach to reinstate people's faith in governmental decisions and official statistics, by **linking statistics to actual individual living conditions**, in a grassroots approach. This is the purpose of **Wikiprogress**, a participatory public web platform for a global dialogue on the concept of progress in the 21st century, linked to basic concerns on raising income inequalities and quality of life. It is a platform which aims to use effective **visualization tools** to better understand environmental, social and economic indicators and to bring them to the mainstream media attention, using social networking. It is also related to the **OECD Better Life Initiative** which seeks new measures of well-being and sustainability, and to the **Wikiprogress.stat** which includes data for progress statistics, both official and unofficial, reconciled through a wiki platform. The main concerns are of course the **quality of the data** (all the more when it includes citizen created articles, statistics and blogs), and the setting up of **trusted networks**, filtering out agents with hidden agendas while encouraging people to contribute outside their daily jobs. And, if institutions open up to people, are they prepared for what they can say about public policies? Do we need guidelines on how to filter conversations? **Data overload**, and the risks that more data could just create confusion, was also mentioned as another serious concern.

In the lively discussion that ensued, many discussed the concept of crowdsourcing, and how the resulting "**wisdom**" can be distorted, for instance by "the deafening echo of individual folly". These platforms should perhaps be better seen as tools to enhance the individual intelligence, not for creating a collective one. Some proposed a new type of science, based on grassroots movements, named **sociotechnology**, which would contribute to defining out-of-the-box solutions which will help reducing consumption.