

WORKING P A P E R

The Future of the Internet Economy

A Discussion Paper on Critical Issues

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Executive summary

RAND Europe conducted a horizon scan of literature relating to the main topics identified by the Organisation for Economic Co-operation and Development (OECD) as agenda items for the 2008 Ministerial Conference on the Future of the Internet. This scan produced a list of topics, which was sent to selected national and international experts for ranking and comments. The message to policy makers that broadly emerged from the expert consultation can be summarised as:

Keep the Internet available and open, by ensuring safe access and use - primarily by 'light touch' measures aimed at raising awareness rather than coercive intervention; and by embracing the Better Regulation principles of minimal, flexible and accountable regulation through appropriate self- and co-regulation, with special attention to issues of participation, transparency, compliance and control of spill-over (e.g. market distortions). Any residual adverse socio-political fallout should be dealt with through 'traditional' public policy measures.

The result of two rounds of expert consultation was a prioritised set of issues which were explored further in four half-day seminars, each addressing one of the four themes of the OECD Agenda. Participants were challenged in a moderated discussion to expand on the topics; assessing their relevance from the perspectives of citizens, governments and business. Subsequently, they were asked to discuss the driving trends and possible underlying issues - loosely labelled as 'values' - which policymakers would need to take into account. Finally, options for government intervention were discussed.

During the study six trends were identified, each consisting of a number of sub-trends. These are:

1. Globalisation trends: Universal connectivity and access, and the cost and benefits of diversity;
2. People trends: Being led by our kids and the empowerment of the individual;
3. Technology trends: a new era of pervasive computing, creating intelligent environments;
4. Relevant security trends: Accepting risks, increasing transparency and taking precautions just like in the physical world;
5. Relevant economic trends: Balancing collaboration and competition, stability and innovation;

6. Governance trends: accepting the global, multi-faceted nature of the Internet and dealing with failing jurisdictions and poor enforcement.

From the trends and the responses that these trigger, a set of emerging (non-exclusive) 'values' were identified:

Identity and privacy

- Control over personal data: people do not own personal data, yet should be in a position to control it;
- Privacy: the use of private personal data must be sufficiently justified; people want to be protected and not spied on;
- Anonymity: people have the right to keep secrets, and possibly even the right to certain anonymity;
- Multiple identities: people's identities consist of different elements and they want to retain control over them;

Transparency and openness

- Transparency: people require transparency to enable them to decide about the desirable level of privacy and what level of risk they will take;
- Responsibility: people and organisations need to define how responsibility is allocated and assumed, and how accountability is established;
- Sharing, openness, and fairness: people self-organise and private and public organisations will facilitate this as they are aware that a lot more can be achieved and many more people can be engaged by opening up processes and information and inviting active participation.

Global access and diversity

- Diversity: people and organisations shall accept and embrace diversity on the Internet as an asset for information sharing and innovation, even if it creates new challenges
- Trust in the Internet: trust is the essential component for further collaboration and growth of the Internet and will depend on how risk is managed, costs are allocated and effective remedies are provided;
- Universal availability and affordability: introduction of IPv6 to avoid lack of address space and possible fragmentation of the Internet in the near future

The trends and emerging values have something to say for the possible role and responses of government:

- Accept the loss of control and redefine the role of government as enabler of the context for self- organisation
- Assume a user-oriented approach in its governance role, being aware of the international dimension of anything happening on the Internet;
- Take a risk based approach to security, and consider supporting the uptake of risk reducing measures (like in "real life", such as pointing out risks of certain behaviour, or stimulate uptake of firewalls, etc, or even stimulate industry-wide investment in new protocols like IPv6)

- Aim to use new means to overcome old “divides” and at the same time be aware of possible new digital divides (locations, regions, generations, educations) that may need to be prevented
- Assess need for change in IPR policy whilst being mindful of its impacts on innovation
- Keep an eye open for new threats, for instance: how to deal with semantic attacks, and the role of public policy decision makers in addressing these
- Stimulate social innovation; collaboration between government and social networks; facilitating best practice
- Support and lead in the use of open standards and enabling interoperability
- Embrace communities of interest and collective approaches; decision making capability, accountability, representation and certification or endorsement of outcomes

In assessing these trends, values and the changing role of government the following picture emerges that could serve as a high level frame of reference.

Openness and transparency are essential character traits of the Internet economy and should be embraced by governments as necessary components to deal with issues of privacy, security and active inclusive participation. The creative and entrepreneurial individual – organised or not - is at the heart of this development and the open Internet is his habitat. In this world government does not only ‘govern’ but facilitates, enables, shares, empowers, creates awareness and stimulates trust. Government will also retain an important role in ensuring effective competition and supporting innovation, through the use of open standards and the application of intelligent but not overly restrictive IPR policies, which support the innovators and not the concentration of market power.

National and international government cannot effectively control or regulate this space and needs to embrace industry, service providers and other stakeholders in self-governing and co-regulatory arrangements. Governments may back these up and strengthen them through political, financial and sometimes regulatory means.

The virtual and the real world abide to many of the same rules, with human rights and respect for personal space as guiding principles. Also there are risks and benefits like in the real world, which need to be understood and managed. Yet at the same time it seems important to only take measures in areas where it is seen to be necessary, because of facts, rather than because of assumptions, in order to avoid that unnecessary barriers are created that would stop innovation in technology and its application in ways that may well be of benefit to society at large. The Internet economy is truly global and diverse, which creates many interesting opportunities for all, and connectivity and access for all should be supported wholeheartedly, notwithstanding some of the risks. To ensure this open, global character and free access, IPv6 has to be actively promoted.