



# World Computer Congress 2010

International Federation for Information Processing  
Brisbane Convention & Exhibition Centre, Australia  
20-23 September 2010

[www.wcc2010.com](http://www.wcc2010.com)



ifip

## Call for papers

# 9th IFIP Human Choice and Computers International Conference

[www.wcc2010.com/HCC92010](http://www.wcc2010.com/HCC92010)

## Conference topics

HCC is the flagship Conference of TC9. A short summary of the eight previous conferences and the list of their Proceedings can be found on the TC9 website at: <http://www.ifiptc9.org/>.

HCC-9 is divided into 4 main tracks:

1. Ethics and ICT Governance
2. Virtual Technologies and Social Shaping
3. Surveillance and Privacy
4. ICT and Sustainable Development

Each of them is presented with their possible topics to be developed:

### Programme Committee Chairs

#### HCC9 Chairs

Jacques Berleur, Namur University, Belgium

Magda Hercheui, Westminster Business School and London School of Economics, United Kingdom

## Track 1: Ethics and ICT Governance



Govern IT

Governance is an old word that goes back to Plato. The concept disappeared for a while, and was replaced by ideas like government, and government policy. Governance has now returned to the scene. Today, it focuses on issues like participative democracy and transparency. [White Paper, 2001]

The state is no longer a unique partner in regulating systems. Other actors take part at the local, regional, national, and international levels. New means of regulating scientific, technical, and other subsystems, and new ways of communicating, are possible among a variety of actors and subsystems.

Internet governance has been a highly debated issue throughout the early part of the first decade of the twenty-first century, particularly at the World Summit on Information Systems (WSIS), held in Geneva in 2003 and in Tunis 2005. The proposal of the Working Group on Internet Governance (WGIG) was adopted in Tunis. It put forward a multistakeholder approach to Internet governance. [WGIG, 2005] Stakeholder engagement has since become increasingly strong.

These debates raised other questions, particularly with regard to the role of business as a stakeholder. If the word "government" seems familiar, "civil society" and the "private sector" are perhaps less well defined. "Civil society" can be defined rather simply in the spirit of Habermas, the philosopher. Or, it may be

subject to more extensive definitions that can open up discussions on precisely which kinds of organisations should be among the participants in civil society, and the extent to which business, business associations, and business systems are or should be involved. [Weerts, 2004; Civil Society Centre - LSE, 2007] Everyone knows that the private sector indicates primarily the business sector. Indeed, the business sector is often represented in official circles that make decisions about the Internet. Examples include the National and International Chamber of Commerce, the Davos Economic Forum, and the GBDe (Global Business dialogue on Electronic commerce, <http://www.gbd-e.org/>).

Ethics, and particularly the "Ethics of Computing", are certainly fields worth deepening. IFIP's SIG9.2.2 has been working in this domain for almost 20 years. The group has produced various books and monographs on the ethics of computing. Yet it recognises that current literature and guidelines could be enhanced and expanded.

The main goal of the HCC9 Track on Ethics and ICT Governance is to offer a forum to make this new field of the ethics of computing, and its research and practice. The Track will include papers on these and other subjects:

ICT governance: overviewing the research

- Concepts of governance: from theory to practice
- Ethics of computing: concepts and schools
- Ethics and ICT governance
- ICT ethics: governance models
- Research on ICT ethics governance: results of current research

Ethics and ICT governance: evaluating its practice

- Ethical governance: specific challenges
- Ethical governance: new and developing fields of applications (eAccessibility, eGovernment, eHealth, eSustainability)
- Gender and Diversity - an ethical issue
- Regulation as an ethical democratic issue of governance

- Evaluation of the effectiveness of current governance policies
- Application of suitable governance arrangements
- Evaluation of viability of suggested governance policies
- Ethical tools for ICT governance

ICT governance: assessing its institutions and technical components

- Internet governance and ICANN
- The Internet Governance Forum (its role, strengths, and limits).
- Challenges posed by the Internet of Things
- Cybersecurity for people and nations
- Technical norms: ipv6, and various protocols

#### Programme Committee Chairs

Jacques Berleur, Namur University, Belgium  
Philippe Goujon, Namur University, Belgium  
Diane Whitehouse, The Castlegate Consultancy, UK

Julie Cameron, Consultant, Australia  
Annemieke Craig, Australia  
Richard Delmas, ECC  
Penny Duquenoy, Middlesex Univ, UK  
Catherine Flick, Namur Univ, Belgium  
Françoise Massit-Folléa, Vox Internet, France

Marc van, Lieshout, TNO, The Netherlands  
John Weckert, Charles Sturt Uni., Australia  
Gunnar Wenngren, Linkjöpings Consultant, Sweden  
Chris Zielinski, WHO, United Nations

#### Programme Committee Members

## Track 2: Virtual Technologies and Social Shaping



DeliverT

Following on the recent (April 2009) International Working Conference of IFIP 9.5 Working Group on Virtuality and Society: "Images of Virtuality" at Athens University of Economics and Business, Greece, this conference is part of the TC9-HCC9) of the IFIP World Computer Congress, in Brisbane, Australia, September 2010 <http://www.wcc2010.org/>.

This Track will focus on the feedback loops between virtual technologies and the social groups who use them, how each shape the other and are in turn shaped by them.

Social shaping, the sociology of technology, science studies and other approaches of cultural studies to the phenomenon of the information society, driven by such classics as those of Bijker and Law and Mackenzie and Wajcman from the 1990s, are arguably now ready for a fresh look, in the context of virtual environments and global social networking and gaming communities. The intervening years have additionally seen an explosion

of digital and media arts interpretations, and explorations of the impact of virtual technologies upon society, and the social use of such technologies upon their design, and the entrepreneurial trajectories of their appearance in the global market.

Virtual technologies, crucially, have moved very decisively from the workplace – whether corporate or home office - and into the domestic sphere, into our living rooms, playrooms, our kitchens, and our bedrooms. Here the relationship between virtual technologies and society, and the mutual shaping processes each undergo, are ripe for fresh study, insight, and exploration. The Virtuality and Society Working Group sub-Track of the Human Choice and Computers Track of the World Computer Congress therefore invites research and work-in-progress papers that address the choices faced by an information society permeated by ubiquitous virtual technologies.

Relevant topics and themes include, but are not limited to:

- Discussing issues of responsive and iterative user-centred design, usability, accessibility, and the 'permanent beta' of virtual systems
- Discussing the impact of virtual technologies within the domestic sphere and the changes to such technologies developed out of use-cases
- Exploring new (e-, or v-) research methodologies and techniques on inquiring into social action in the context of virtuality
- Identifying challenging social, ethical, and political issues of socialization in virtuality
- Discussing the role of electronic and digital arts and media in the shaping of virtual technologies and their uses
- Discussing the role of digital gaming and massive multiplayer

role-playing games in the shaping of virtual technologies and their uses

- Discussing virtual spaces and the role of place in virtual technologies, and how the domestic as well as the work and civic spaces of the information society are shaped by, and in turn shape such technologies
- Identifying opportunities and challenges for education, governance, and entrepreneurship in virtual worlds
- Discussing emerging issues of e-policy and e-quality of life specifically implicated by virtual technologies
- Exploring social histories and philosophies that deepen our understanding of term virtuality, and of the relationship between virtual technologies and society and the mutual shaping processes between them.

#### Programme Committee Chairs

David Kreps, Salford Business School, Salford University, UK  
Martin Warnke, Computer Science & Culture, Leuphana University, Lueneburg, Deutschland.  
Claus Pias, University of Vienna, Austria

#### Programme Committee Members

Chrisanthi Avgerou, Mgt Info Sys & Innov, London School of Economics and Political Science, UK  
Oliver Burmeister, University of Wollongong, Australia  
Simran Grewal, University of Bath, UK  
Niki Panteli, School of Management, University of Bath, UK

Erika Pearson, Otago University, Dunedin, New Zealand  
Angeliki Poulmenakou, Management Science & Technology,  
Athens University of Economics and Business, Greece

Steve Sawyer, College of Information Sciences and Technology,  
Penn State University, USA  
Lin Yan, Greenwich University, UK

## Track 3: Surveillance and Privacy



Trust IT

New technical and legal developments pose greater and greater privacy dilemmas. Governments have in the recent years increasingly established and legalised surveillance schemes in form of data retention, communication interception or CCTVs for the reason of fighting terrorism or serious crimes. Surveillance Monitoring of individuals is also a threat in the private sector: Private organisations are for instance increasingly using profiling and data mining techniques for targeted marketing, analysing customer buying predictions or social sorting. Work place monitoring practices allow surveillance of employees. Emerging pervasive computing technologies, where individuals are usually unaware of a constant data collection and processing in their surroundings, will even heighten the problem that individuals are effectively losing control over their personal spheres. At a global scale, Google Earth and other corporate virtual globes may have dramatic consequences for the tracking and sorting of individuals. With CCTV, the controlling power of surveillance is in few hands. With live, high resolution imagery feeds from

space in the near future, massive surveillance may soon be available to everybody, a development whose consequences we do not yet grasp. New means of surveillance are also enabled by social networks, in which individuals are publishing many intimate personal details about themselves and others. Such social networks are today already frequently analysed by employers, marketing industry, law enforcement or social engineering.

The aim of this conference Track is to discuss and analyse such privacy risks of surveillance for humans and society as well as countermeasures for protecting the individuals' rights to informational self-determination from multi-disciplinary perspectives.

We are therefore especially inviting the submissions of papers addressing privacy aspects in relation to topics such as (but not limited to):

- Surveillance technologies
- Corporate virtual globes (Google Earth and Microsoft Virtual Earth)
- Profiling & data mining
- Ambient Intelligence, RFID
- GPS, Location-Based Services
- Social Network Analysis
- ID cards
- Biometrics
- Data sharing
- Visual surveillance
- Workplace monitoring
- Communication interception
- Data retention
- Anonymity & Pseudonymity
- Privacy-enhancing technologies
- Privacy-enhancing Identity Management

### Programme Committee Chairs

Simone Fischer-Hübner, Karlstad University, Yola Georgiadou, ICT, United Nations University

### Programme Committee Members

Jacques Blamont, CNES, France  
Roger Clarke, Xamax Consultancy Pty Ltd, Aust  
George Danezis, Microsoft Research  
Claudia Diaz, KU Leuven, Belgium  
Martin Dodge, U Manchester, UK  
Marit Hansen, ULD

Francis Harvey, U of Minnesota, USA  
Mireille Hildebrandt, VU Brussels, Belgium  
Jan Holvast, Holvast & Partner, The Netherlands  
Ronald Leenes, Tilburg University, The Netherlands  
Chris Perkins, U Manchester, UK  
Andreas Pfitzmann, TU Dresden, G  
Charles Raab, Edinburg University, UK  
Kai Rannenberg, Goethe Uni. Frankfurt, G  
Jozef Vyskoc, VaF  
Louise Yngström, Stockholm Uni./KTH, Sweden



Information and Communication Technologies are perceived both as enablers of technological and societal change towards sustainable development and as drivers of increasing energy and materials consumption, thus leading us away from the goal of sustainable development.

IFIP's World Computer Congress 2010 will therefore include a Track of contributions on the relationship between ICT and SD, entitled "Sustain IT", with the aim of reconciling future Informa-

tion and Communication Technologies with sustainable development (SD).

In order to cover the full range of the complex relationship between ICT and SD and to stimulate an interdisciplinary discourse on "ICT for SD", we invite herewith researchers working on various aspects of this issue to contribute to this WCC10 Track. We will break down the issue into the following three topics.

#### ICT hardware and SD

- What are the qualities and quantities of the material and energy flows caused by the life cycle of ICT hardware and how can we assess their relevance for SD?
- What are the environmental and social implications of electronic waste (e-waste) Tracks rising in industrialized countries and emerging economies?
- What are the environmental and social implications of a growing demand for scarce chemical elements as they are increasingly used in ICT production?
- What are sound methodologies to assess the energy demand of ICT infrastructures and services?
- What innovations are necessary to reduce the life-cycle wide material and energy demand of ICT services, e.g. in the field of "Green IT"?

#### ICT applications and SD

- What are the potentials to apply ICT for energy efficiency in production and consumption, and what are the conditions for realizing these potentials?
- What are the potentials to apply ICT for materials efficiency or resource productivity, and what are the conditions for realizing these potentials?
- What ICT applications have the potential to contribute to the reduction of greenhouse gas emissions or to the adaptation to climate change?
- -Which methodology can be used to assess optimization, substitution and induction effects of ICT with regard to resource-

#### intensive processes?

- How can we link organizational, regional, national and global perspectives in using ICT to support SD?
- What is the relationship between "ICT for development" and "ICT for sustainable development"?

#### ICT-enabled structural change towards SD

- What is the role of ICT in sustainable production and consumption, resource productivity or economic dematerialization (decoupling total material consumption from GDP)?
- How can we better understand rebound effects of ICT-induced efficiency gains and under what conditions can they be avoided?
- What is the relationship between conceptions of the "the information society" and SD?
- Is ICT going to bring about a "third industrial revolution", and how is this perspective related to SD?
- What economic frameworks and conditions, including trade and tax regimes, are needed to enable ICT-supported structural change towards SD?
- What is the relationship between ICT, GDP growth and measures of progress beyond GDP (human development indicator, indicators for wellbeing, quality of life or happiness)?
- What are the most relevant research questions in sustainability science regarding the role of ICT?

#### Programme Committee Chairs

Lorenz M. Hilty, Empa, Switzerland

Magda Hercheui, Westminster Business School and London School of Economics, United Kingdom

#### Programme Committee Members

Gunilla Bradley, em. Royal Institute of Technology, Sweden

Vlad Coroama, Empa, Switzerland

Mihaly Csoto, ITTK, Hungary

Lorenz Erdmann, IZT, Germany (tbc)

Klaus Fichter, Borderstep Institute, Germany

Roland Geyer, University of California Santa Barbara, USA

Wolfgang Hofkirchner, Univ. of Salzburg, Austria

Shirin Madon, London School of Economics, United Kingdom

William McIver, National Research Council, Canada

Bernd Page, University of Hamburg, Germany

Tony Vetter, International Institute for Sustainable Development, Canada

Eric Williams, Arizona State University, USA

# Important dates

Submission of papers: January 31, 2010  
Notification to authors: April 20, 2010  
Camera-ready copies: May 15, 2010

## Instructions for paper submission

- Papers must not substantially overlap with papers that have been published or are simultaneously submitted to a journal or another conference with proceedings.
- Papers must be written in English; they should be at most 10-12 pages in total, including bibliography and well-marked appendices. Papers should be intelligible without appendices, if any.
- Accepted papers will be presented at the conference and published in the IFIP Series by Springer. Submitted and accepted papers must follow the publisher's guidelines for the IFIP Series ([www.springer.com/series/6102](http://www.springer.com/series/6102), author templates, and manuscript preparation in Word).
- At least one author of each accepted paper must register to the conference and present the paper.
- All papers must be submitted in electronic form (Word document) through the HCC9 chairs and respective track chairs (see details below), indicating for which HCC9-track they apply (in the subject field).
- Papers submitted after this deadline will be discarded without review.

- 
- ***Intention to submit and submission must be sent to the two HCC9 2010 IPC Chairs (Jacques Berleur and Magda Hercheui), and accordingly to your track choice to the track chairs:***

### HCC9 2010 Chairs

Jacques Berleur, Namur University, Belgium: [jberleur@info.fundp.ac.be](mailto:jberleur@info.fundp.ac.be)

Magda Hercheui, Westminster Business School and London School of Economics, United Kingdom: [m.hercheui@gmail.com](mailto:m.hercheui@gmail.com)

### Track 1: Ethics and ICT Governance

Jacques Berleur, Namur University, Belgium: [jberleur@info.fundp.ac.be](mailto:jberleur@info.fundp.ac.be)

Philippe Goujon, Namur University, Belgium: [philippe.goujon@fundp.ac.be](mailto:philippe.goujon@fundp.ac.be)

Diane Whitehouse, The Castlegate Consultancy, United Kingdom: [dewwhitehouse@gmail.com](mailto:dewwhitehouse@gmail.com)

### Track 2: Virtual Technologies and Social Shaping

David Kreps, Salford Business School, Salford University, United Kingdom: [d.g.kreps@salford.ac.uk](mailto:d.g.kreps@salford.ac.uk)

Martin Warnke, Computer Science & Culture, Leuphana University, Lueneburg, Germany: [warnke@leuphana.de](mailto:warnke@leuphana.de)

Claus Pias, University of Vienna, Austria: [claus.pias@media-theory.com](mailto:claus.pias@media-theory.com)

### Track 3: Surveillance and Privacy

Simone Fischer-Hübner, Karlstad University, Sweden: [simone.fischer-huebner@kau.se](mailto:simone.fischer-huebner@kau.se)

Yola Georgiadou, International Institute for Geo-information Science and Earth Observation (ITC), Netherlands: [georgiadou@itc.nl](mailto:georgiadou@itc.nl)

### Track 4: ICT and Sustainable Development

Lorenz M. Hilty, Empa, Switzerland: [Lorenz.Hilty@empa.ch](mailto:Lorenz.Hilty@empa.ch)

Magda Hercheui, Westminster Business School and London School of Economics, United Kingdom: [m.hercheui@gmail.com](mailto:m.hercheui@gmail.com)

# The Congress

The World Computer Congress (WCC2010) will bring together IT research and industry sectors in one event. The congress will combine 18 IFIP conferences with partner conferences from other international and regional, specialist IT organisations.

The conference content will be presented in eight program streams. Delegates may attend any of the participating conference, industry or partner events as well as networking, social, technical tours and certification courses offered at the congress.

	Deliver IT	<ul style="list-style-type: none"> <li>• Wireless Communications and Information Technology in Developing Countries (WCITD 2010)</li> <li>• Biologically-Inspired Collaborative Computing (BICC 2010)</li> <li>• Distributed and Parallel Embedded Systems (DIPES 2010)</li> <li>• Artificial Intelligence in Theory and Practice (IFIP AI 2010)</li> <li>• Network of the Future (NF)</li> <li>• Enterprise Architecture, Integration, Interoperability and Networking (EAI2N)</li> <li>• Human Choice and Computers International Conference (HCC9 2010)</li> </ul> <p>Track 2: Virtual Technologies and Social Shaping</p>
	Trust IT	<ul style="list-style-type: none"> <li>• International Information Security Conference (SEC 2010)</li> <li>• Critical Information Infrastructure Protection (CIP)</li> <li>• Human Choice and Computers International Conference (HCC9 2010)</li> </ul> <p>Track 3: Surveillance and Privacy</p>
	Value IT	<ul style="list-style-type: none"> <li>• Theoretical Computer Science (TCS 2010)</li> <li>• Human Computer Interaction (HCI 2010)</li> </ul>
	Learn IT	<ul style="list-style-type: none"> <li>• Key Competencies in the Knowledge Society (KCKS 2010)</li> <li>• History of Computing (HC)</li> </ul>
	Govern IT	<ul style="list-style-type: none"> <li>• Global Information Systems Processes (GISP)</li> <li>• E-Government and E-Services (EGES)</li> <li>• Human Choice and Computers conference (HCC9 2010)</li> </ul> <p>Track 1: Ethics and ICT Governance</p>
	Treat IT	<ul style="list-style-type: none"> <li>• E-Health (EHEALTH)</li> </ul>
	Sustain IT	<ul style="list-style-type: none"> <li>• Human Choice and Computers International Conference (HCC9 2010)</li> </ul> <p>Track 4: ICT and Sustainable Development</p>
	Play IT	<ul style="list-style-type: none"> <li>• Entertainment Computing Symposium (ECS 2010)</li> </ul>