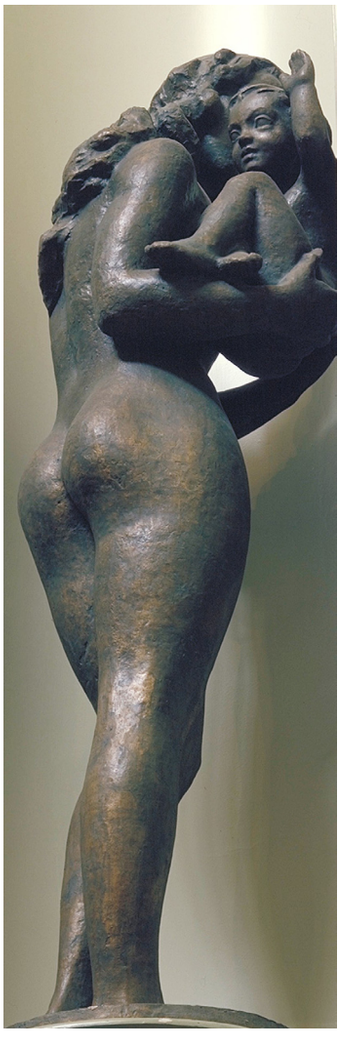
The Fifth General Assembly of the International Parliamentarians' Association for Information Technology

IPAIT V

Human Competency Development in the Information Society

Helsinki 15–17 January 2007



Edited by Jyrki Kasvi, Paula Tiihonen, Katja Nolvi
Parliament of Finland, Helsinki
Committee for the Future

Cover: Statue “Future” by Väinö Aaltonen, bronze 1932
Parliament of Finland, Assembly Chamber

ISBN 978-951-53-2964-6 (PDF)
Helsinki 2007

Foreword

The Committee for the Future of the Eduskunta, the parliament of Finland, had the pleasure to host the Fifth General Assembly of the International Parliamentarians' Association for Information Technology IPAIT V. The various units of the Eduskunta and several outside experts set to work in earnest – recognising from the outset also the fact that this was once again an opportunity for the organisers to obtain a lot of valuable information from the world. And that was indeed what happened.

Because IPAIT is a new organisation and does not have a permanent secretariat, its charter and meeting documents have remained uncompiled. The most important consideration has been to pay attention to matters themselves rather than to bureaucracy. The Internet has been an ideal instrument for mediating and managing information, but we noticed very soon that it has its shortcomings when it comes to managing past information. For this reason we compiled the Association's rules and put them in the Assembly proceeding publication as the first item. The publication also includes the resolutions made together at the plenary session as well as the various general presentations and contributions that are in written form. Unfortunately, we had to abandon publication in the case of the country reports, because quite many of them were PowerPoint presentations, which have a different character and use. The same limitation applied unfortunately to the panels' presentations.

But all of us who took part were able to hear and see them live and greatly enjoyed your excellent contributions.

Once again thanks to everyone and looking forward to meeting in Bulgaria!

Jyrki Kasvi
President of IPAIT

Paula Tiihonen
Counsellor of the
Committee for the Future

Katja Nolvi
Assistant for International
Relations

Contents

IPAIT V

Human competency development in the Information Society, Parliament of Finland

Programme

14 January 2007, Sunday		
Time	Event	
	Conference registration	
19:00–22:00	Cocktails in Hotel Simonkenttä	
15 January 2007, Monday		
Time	Event	
8:30 -	Conference registration	
10:00-10:30	Coffee	
10:30-12:00	Meeting of the Preparatory Committee (1 rep/delegation)	Adoption of the Draft Programme Adoption of the Draft Agenda
12:00-12:10 12:10-12:25 12:25-12:30 12:30-13:15	Opening Ceremony	Deputy Speaker Sirkka-Liisa Anttila: Greetings from theFinnish Parliament Opening remarks of the President of IPAIT V Governing the Futures: Dream or Survival Societies?, Professor and Director Jim Dator (USA, Hawaii Research Center for Future Studies) Musical performances: MP Mikko Alatalo, Angelit
13:15-14:15	Lunch	
14:30-16:00	Plenary Session of the General Assembly (1)	MP/Committee for the Future, Jyrki Kasvi, Vice President of IPAIT Opening of the Plenary Session Election of the President and Vice-President Acceptance speech of the new President Adoption of the Programme Adoption of the Agenda of the Plenary Session of the General Assembly Approval of new member countries Admission of observers Appointment of panel Chairs Presentation of the Draft Helsinki Declaration Proposed rule changes Proposals for the host country of IPAIT VI Country reports
16:00-16:30	Coffee	
17:00-19:00	Excursions	F-Secure business visit or Microsoft business visit
20:00-	Buffet Dinner A chance to experience the Finnish sauna culture	Katajanokka

16 January 2007, Tuesday		
Time	Event	
8:30-9:00	Meeting of the Preparatory Committee	Proposed changes to the Programme Proposed rule changes Final documents
9:00-10:00	The new IT systems in Parliament	Session Hall system MP's Portal Legislators-game
10:00-10:30	New National Knowledge Society Strategy: Good Life in Information Society	Ms Katrina Harjuhahto-Madetoja, Programme Director, Information Society Programme, Prime Minister's Office
10:30-11:00	Coffee	
11:00-11:30	Opening remarks for the day	MP Duk-Kyu Kim, Republic of Korea Mr Ahmed Lakir, Vice President, MP, Morocco
11:15-13:00	Plenary Session of the General Assembly (2)	Chair MP Jyrki Kasvi, Discussion on the proposed rule changes Discussion on the Helsinki Declaration Discussion on the Joint Communiqué Country reports
13:00-14:00	Lunch	
14:00-16:00	Panel discussions	Panels: Chair MP Kalevi Olin: Democracy and civil rights in the information society. Panelists: Chair MP Hanna-Leena Hemming: Skills required in the information society. Panelists: Chair MP Jouni Backman: Information security as a civic skill. Information security school & day. Panelists: Chair MP Kyösti Karjula/MP Mikko Alatalo: Innovation Policy. Panelists: Chair MP Astrid Thors: The social capital of children and adolescents in the information society. Panelists: Audience will vote by voting machine during the session.
16:00-16:30	Coffee	
16:30-17.30	Panel discussions	Chairs MP Esko-Juhani Tennilä and MP Marjo Matikainen-Kallström: IT and Russian Scenarios. Panelists: Chair MP Rauno Kettunen and MP Anne Huotari: IT and HealthCare System. Panelists: Audience will vote by voting machine during the session.
18:30-	Leaving from hotels	
19:00-19:30	Keynote speech 2	Professor Pekka Himanen: Creative Society?
19:30-	Buffet Dinner	

17 January 2007, Wednesday		
Time	Event	
8:30-9:00	Meeting of the Preparatory Committee	Changes to the Programme Proposed rule changes Promulgation of the Draft Declaration and Draft Communique to delegations Final documents
9:00-10:00	Presentation	Mr Risto Linturi
10:00-12:00	Guided tour of Helsinki	or/and
10:00-11:30	Presentation	A Finnish school system / PISA results Professor Jarkko Hautamäki, University of Helsinki
13:00-14:00	Lunch	
14:00-15:45	Plenary Session of the General Assembly (3)	Chair Jyrki Kasvi, Speech of MP/South African Parliament Adoption of rule changes Adoption of the Helsinki Declaration Adoption of the Joint Communiqué Selection of the host country of IPAIT VI 2008 Selection of the theme for IPAIT VI 2008 Country reports
15:45-16:00	Closing	The President's closing remarks Acceptance speech of the host of IPAIT VI
16:00-17:00	Press conference	
18 January 2007, Thursday		
Time	Event	
09:00-12.00	An opportunity to acquaint oneself with the Finnish school system and Buffet Lunch	Laurea University of Applied Sciences, Well Life Center or Helia University of Business and Applied Sciences

Acceptance Speech by the new President

Mr Jyrki KASVI, MP, Eduskunta of Finland

Your Excellencies, Honourable Delegates, Ladies and Gentlemen.

On behalf of the Eduskunta, the parliament of Finland, I am most pleased to welcome you all to the Fifth General Assembly of the International Parliamentarians' Association of Information Technology.

I also want to express my gratitude for the trust you have placed in me and the Eduskunta's Committee for the Future.

I myself, my colleagues here in the Eduskunta and the staff of the secretariat promise to do our best to live up to your expectations for the IPAIT V.

We are celebrating the centenary of the Eduskunta right now. A hundred years ago Finland became the first nation to give full political rights to its entire adult population regardless of social status or gender. All women and men of age got the right to vote and stand for election. Nineteen members of the very first Eduskunta were women.

We in the Eduskunta are very proud to host the IPAIT General Assembly as an integral part of our jubilee celebrations. IPAIT is one of those forums where the future of parliaments and the future of democracy are being discussed. New information and communication technologies are going to change the working environment of parliamentarians as profoundly as that of any other profession.

As you can see, this auditorium is packed full. There are 115 of us from 36 countries. A new record, I believe. And this in spite of the fact that registration via the Internet was opened way too late due to some bureaucratic hurdles. I am sorry for the delay – and happy that it did not stop you from registering and coming here!

Not all of you are members of IPAIT yet, as some of you have only come to see what this thing called IPAIT is all about. I really appreciate your interest and effort. I know how valuable parliamentarians' time is and hope you will find your trip here worthwhile and consider applying for IPAIT membership before the next General Assembly meeting.

We have addressed the theme of this Assembly, 'Human Competency in the Information Society' from a great variety of angles in our agenda, but hope you will also appreciate the additional programmes we have included into the next few days. I believe that the new computer systems here in the Eduskunta may interest you as well as a chance to visit one of the leading virus scanning software companies in the world.

But the main issue of these days is Human Competency Development in the Information Society. It is not only interesting, but important as well. It incorporates a whole range of issues, from defining the competencies needed in the information society to computer-supported learning.

It is only a few years since all we needed to do well in the information society was computer skills. So we started training with programming lessons. We could not have been more wrong. It is not technical skills, but social competencies that define success. New kinds of social capital are needed in the information society and new kinds of social skills that apply in a networked world. For example, some employers have already started to ask people how well they get along with others on the Internet. Do they have leadership experience in multiplayer online games? These are skills sorely needed in global networked organisations.

But why do we talk about new social capital when it is the old-fashioned reading and writing skills that are lacking in many parts of the world? They are the real basic competencies that are needed in the information society. Because both are required, both need to be discussed.

If we want new digital technologies to benefit everyone, not only the rich industrial nations, we need to provide the people in developing nations with the basic skills needed in the information society, starting with reading and writing but not stopping there. Otherwise they will not be able to follow in the footsteps of the new growing nations like China, India and Brazil.

If we were to name one area where new information and communication technologies should be making an impact, we would probably agree that it would be learning.

No wonder great expectations have been focused on such terms as programmed learning, computer- assisted instruction, computer-based training, distance education, virtual learning and, for the time being, e-learning.

No one can deny that there has been a lot of empty hype around e-learning and its precursors. Hundreds of national and international e-learning seminars and conferences, research and development projects, books, articles, studies, dissertations, strategies, framework programmes and policies.

But… when we go into an ordinary classroom or corporate training centre, we see how little things have actually changed. The basic paradigm of our educational system is still based on the principles adopted in the early 20th century. And as long as this paradigm dominates, e-learning will fail to deliver on our expectations. If we just glaze an outdated educational system with IC technology, we do not get e-learning, we get classroom teaching with computers and Internet access.

So, what should we do in order to fulfil the promise of e-learning, in order to shake off bygone learning paradigms and our outdated views on new interactive media?

We should look, not into the new IC technologies, but into the new cultures that are evolving around those technologies. IRC galleries, RSS feeds, mobile tribes, Peer-to-peer pirates, blogging, massive multiplayer online gaming, podcasting.

What are they? New kinds of social networks and structures made possible by these new technologies. And what is more, they were not designed nor developed; they have simply evolved around basic human needs. They are rapidly becoming more and more popular. And they will certainly not be the last of their kind.

These new cultural phenomena not only offer new technologies that we can use in our e-learning systems, but they also provide us with inspiration for totally new approaches to learning itself.

In particular, they share one characteristic that makes them so alluring to people that can be used to motivate learners: the lack of hierarchy. They are democratic bordering on the anarchistic. Everyone not only receives, but also gives. Not only learns, but also teaches.

There will be challenges, of course, when we try to adopt these new ideas in our learning system. Control or guidance of learning will be difficult due to the unpredictable nature of these technologies, and learning outcomes may sometimes be quite different from what was originally planned. But, on the other hand, the learning outcomes will reflect the real needs and interests of the learners.

Are we ready to accept that? Well, I am confident that we are ready to discuss it. And what would be a better forum for it than IPAIT?

With that sentiment, I once again welcome you all to Finland, Helsinki and IPAIT V.

Opening Remarks

Hon. KIM Duk Kyu, Head of the Korean Delegation

Honorable Chairman Mr. Jyrki Kasvi, Distinguished delegates,

First of all, I'd like to express my deepest gratitude for the opportunity to give you opening remarks looking back and moving forward for the IPAIT's future at the fifth IPAIT General Assembly. Allow me once again thank Chairman Kasvi and staff of the Finnish Parliament for their efforts to make this meeting a success.

With a hope, Asian people have celebrated the start of year 2007 as so-called "the year of the golden pig", which only comes around once every 600 years and is believed to bring great prosperity and good luck to all. Taking this opportunity, I wish all of the delegates here today not only a personal political success but also prosperity and good luck at home this year. Importantly, I hope all people in this global community can enjoy the benefits and happiness of the information society.

Honorable delegates,
Let me extend my sincere congratulations to the Parliarnent and People of Finland which celebrate its centennial this year. 100 years ago, the Finnish Parliament introduced equal and universal suffrage and full political rights for woman for the first time in the world. I hope many nations can share the experience and passion for democracy and human rights with the Finnish Parliarnent and people.

Honorable colleagues,
As a head of delegation from the Korean National Assembly that took the lead in founding IPAIT, I'd like to take a look back at the IPAIT activities for the past six years since its inception in 2002 and look forward the future tasks for IPAIT.

As you may be well aware, IPAIT was established with an aim to achieve the balanced development of information technologies for the world and share information among nations by supporting IT development at the parliamentary level and promoting intemational exchanges and cooperation. Since its inaugural Assembly in Seoul, followed by the Assembly in Bangkok, Brasilia, Rabat and today Helsinki in Finland, I'm convinced that IPAIT has made great contributions to the global informatization by exchanging our experience and knowledge together.

Especially in the fourth General Assembly held in Rabat, Morocco, with UN and World Bank as observers, we laid a foundation for the specific intemational cooperation framework, which is needed to achieve our ultimate goals.

As a head of the delegation from Korea, one of the founding members of IPAIT, I feel proud of noticeable development of the Association to what it is today and grateful for your contributions and support.

Distinguished colleagues,
Even as we speak, all nations in the world are moving fast toward the information society and overseeing and coordinating their IT policies by sharing knowledge, information and experience together to move forward. Accordingly, despite what IPAIT has achieved so far, there is still a long way to go for us.

Among many tasks we have to tackle in the future, I want all of us to focus our wisdom and resources on the following three priorities.

First, we should focus on improving the personal information protection system which is getting more vulnerable as the information technologies develop. Because to protect information human rights in the information society is a prerequisite for protecting our inalienable values such as democracy and human rights. Therefore, parliamentarians should oversee the Administration with their legislative powers by taking an interest not only in positive effects of the information society but also in negative ones.

Second, we should pay more attention to the marginalized people from informatization. In this knowledge information society where changes are faster than it was in the industrial society, the disadvantaged cannot catch up the speed of change thereby falling into a vicious circle where information inequality as well as economic inequality repeats on and on. Therefore, we should share our information and experience together and focus more on policy research aimed at breaking the vicious circle in order to provide the underprivileged from informatization with equal opportunities to prepare for the future.

Third, we should concentrate our wisdom on establishing strategic cooperative partnership with the Global Centre for Information and Communication Technologies (ICT) in Parliament, set up by IPU and UN with an aim similar to that of IPAIT in last November in Rome. As you may know, the new Centre seeks to promote the utilization of ICT for more open, transparent and efficient parliamentary activities and strengthen the role of parliaments in promoting basic laws and strategies for the development of the information society.

As I mentioned before, therefore, consolidated cooperation with IPU and UN is necessary for IP AIT to deve10p itself, based on its intemational cooperation framework established through four rounds of Assembly in the past, into more influential and reliable body in the intemational society. To that end, we should pursue co-host of the Assembly and information-sharing on the basis of strategic partnership with the ICT Centre.

Last but not least, I hope every one of you here today at this fifth IPAIT General Assembly will suggest useful and constructive IT policies based upon exchange of our own valuable experiences and knowledge.

Thank you for your attention.

Welcome Address

Ms Sirkka-Liisa Anttila, Deputy Speaker of the Eduskunta

Committee Chair, Fellow Parliamentarians and Esteemed IPAIT Guests!

It is a pleasure to see you here in Finland in such large numbers! I heard that the organisers originally expected 50 participants, so we are all really delighted to see the number exceed 130. I am especially pleased to see that some of you have come from quite faraway countries, for which reason we can look forward to the presentation of a great diversity of views reflecting different worlds and different futures. IPAIT began in Asia, where the first conferences were held. From there it spread to Latin America, to Brazil, whence it reached the Nordic region and Finland via Morocco in North Africa. This reflects also the course that the themes of the conferences have followed, because Asian countries have been pioneers in many IT matters in the 21st century. We in the other continents are trying to follow in their footsteps. I am very glad that you have come to Finland for this conference. We Finns are proud of our technological competence. Nokia is our flagship in the world IT sector.

Finland's latest innovation in the IT sector is the centralised national patient database that we have set up here. Just before Christmas, the Eduskunta enacted legislation regulating electronic processing of client data in the social welfare and health care sector. This explains why the possibilities that IT offers the health care sector received an exceptionally great deal of parliamentary time and attention here in Finland last year. A report by the Eduskunta's Committee for the Future, which assessed opportunities in the field of health care over the long-term, was completed last spring. One of the key themes in this report, which is part of the Eduskunta's technology assessment work, was the opportunities available to the health care sector to make use of information and communication technology.

A few thoughts on IT-related questions in the health care sector are appropriate here. That is because the problems facing the sector, and also the solutions to them, concern all countries. Considering what a large proportion of national income health spending consumes everywhere, information technology is a really valuable instrument when it works. Of course, what is even more important is that information technology can help us to substantially improve health and lengthen people's lives.

Information technology can be applied to health care in the greatest imaginable variety of ways. Really good progress has been achieved in one field in Finland. Finnish doctors make very active use of electronic treatment recommendations through a system maintained by their own organisation, the Medical Society Duodecim. Already by 2004, every doctor in Finland was following one treatment recommendation per day on average. That same year, in fact, Finnish doctors make as much use of electronic treatment recommendations as all of the doctors in the USA put together.

Developing the work of doctors and other care personnel with the aid of digital archives of patient records, laboratory results and images is a major challenge. If technology were the only thing involved, a doctor in Finland would never again have to start treatment from the beginning, take new X-rays or conduct new lab tests just because earlier data could not be found. In practice, however, different data-storage standards and problems associated with data protection – but also prejudices on the part of care personnel – have been a substantial impediment to better use of the opportunities that technology offers. That is the case both here in Finland and elsewhere. The ambitious

goal that our Government set in 2002, namely to cut health care costs by as much as 10 per cent with the aid of measures of this kind, has not yet been achieved.

Under legislation enacted by the Eduskunta, one national electronic patient data archive is being created in Finland. After a transition period of four years, it will operate nationwide to uniform standards. All instances that create patient data will be obliged to pass on all of the material they collect to the archive. The body maintaining the archive will be a national actor, the Social Insurance Institution.

The legislation in question is very far-sighted not only in the economic sense, but also in principle and from the point of view of ethics. In fact, over the long term it opens up the possibility of a completely new kind of treatment culture. This culture was predicted in the report that the Eduskunta's Committee for the Future submitted in spring 2006 and in the positions that the committee approved on its basis.

Researchers and persons whose work has had to do with health care have long been emphasising that clearly the most effective way of lengthening people's lives and improving their health is to get them to change over to lifestyles that promote health. Without healthy habits – regular exercise, no smoking, moderate use of alcohol and a healthy diet – as well as a healthy living environment, the large amounts of resources being put into health care will only go to waste. A central, if indeed not the most central, task of health care in wealthy countries – not to speak of poor ones – must be to encourage citizens to lead healthier lifestyles.

A prerequisite for people changing the way they live is that they accept responsibility for their own health and the health of those close to them. With the aid of the electronic archive, not only health care personnel but also ordinary people can be provided with the information they need to enable them to assume independent responsibility for their health. In addition to the electronic patient data archive, associated databases containing information on the effectiveness of treatments, the composition of nutrition used as well as genetic data also offer possibilities. To mark the 90th anniversary of our national independence, Sitra, the Finnish Innovation Fund, will this year offer all Finns access to a database that comprehensively describes the effectiveness of treatments. Another important opportunity in the direction of a new health care culture is the service, based on barcode information, that shops in Finland began using last year. For a fee of a few euro, customers can receive a detailed monthly account of how healthy the food they have bought at retail outlets belonging to a particular chain is.

Last year, the Eduskunta of Finland celebrated the centenary of a universal and equal franchise. The parliamentary reform carried through in Finland in 1906 was the most radical in the world in that it gave the right to vote and eligibility for election to both women and men who had reached the age of 24. When the first elections under the new system took place in 1907, women won 19 of the 200 seats, thereby becoming the world's first parliamentarians with full political rights. This year, in May, we shall be holding a jubilee session to commemorate the assembly of the first legislature elected after the parliamentary reform. Before the reform, only 10 – 12 per cent of the Finns – members of the Estates – were represented in the then parliament, the Diet. This year, Finland is celebrating the 90th anniversary of the achievement of our independence.

Ladies and Gentlemen,

The theme of your seminar, the information society, is very topical. As I have already said, technology offers the health care sector many useful applications, such as the electronic patient database I have mentioned. Technology is shortening distances on our globe. Indeed, it is the most important facilitator of globalisation.

With these thoughts, I wish you a really rewarding seminar!

Governing the Futures: Dream or Survival Societies?

Mr Jim Dator, Hawaii Research Center for Futures Studies
Department of Political Science, University of Hawaii at Manoa

Based on a keynote presentation to the Fifth General Assembly of The International Parliamentarians' Association for Information Technology, held in the Finnish Parliament, January 16, 2007.

"Democracy" As A Social Invention

Constitutional representative government, often mistakenly called "democracy", was one of the greatest inventions of the 18th Century. It rivals other 18th Century inventions such as the sextant, the steam engine, the cotton gin, smallpox vaccination--and the guillotine--all of which changed the world in important ways. But all of them also have been superseded by vastly more powerful inventions, while constitutional representative government persists as a strange relic from the past, in more or less the same form, and certainly on the basis of the same mindset from which it originally emerged [1].

Almost all other social inventions, such as those in business, transportation, communication, education, and even religion, are vastly different from what they were in the 18th or 19th centuries, but the forms and features of constitutional representative democracy remain essentially unchanged from when certain social philosophers, primarily in England and France, invented the concepts, and then political craftsmen in France and some of the former British colonies in North America first created structures derived from the ideas, and tried them out as a basis for governing a nation.

In the case of what became the United States, the Founding Fathers were true inventors of enormous wisdom and creativity. They viewed the world from a common set of intellectual assumptions that derived from two of the major intellectual forces of the day-- Newtonian physics on the one hand and a humanistic theology called Deism on the other. They also were inspired by the various living experiments in representative governments that they saw in the thirteen newly-independent states. And so they came up with the idea of "constituting" a government for what they hoped would become the United States of America by handwriting, with a quill pen on parchment, the essential features of that government. This document--this so-called "constitution"--still serves as the procrustean bed of US national government, essentially unchanged in any major way from when it was written in 1787 [2].

The British, French and American examples served as models of modern government everywhere in the world. Even though there are many important differences between those three and the hundreds of other governmental structures they inspired, I would argue that essentially all governments of the world today are still relatively minor variations of those original 18th Century ideas and forms.

Certainly, the underlying Newtonian assumptions of an orderly world whose problems can be solved by rational deliberation is still assumed in modern governance, in spite of reams of scientific research from scores of academic disciplines over the last two hundred years that make it very clear that humans are not and should not be presumed to be fundamentally rational, and that the world

of Newtonian physics is simply one special way of understanding a world better also understood by quantum physics [3], string theory [4], or varieties of evolutionary complexity [5].

But we all remain stuck with the old, once-great, social invention.

Rethinking Governance

There have been at least four times since the end of the 18th century when humans have had a chance to re-think forms of governance, and to re-invent governance on the basis of modern, scientific understandings of the operation of humans and the environment, and on the basis of new communication technologies.

One time was immediately after the Second World War when many of the old colonial empires fell apart and new, allegedly sovereign nations were created. But there was no fundamental rethinking of governance at all at the time. Every one of the so-called independent nations more or less adopted the governing systems of their former colonizers. There were not even serious attempts to modernize the pre-colonial forms and philosophies--which would have been an interesting option.

The results of that lack of vision and courage are around us everywhere. Only a few of the former colonies are vigorous nation-states now (though some are clearly more vigorous than others) and many are what are now being called "failed states." How much of their failure is due to the obsolescence and irrelevance of their formal structures of governance may be debatable, but that the form of government and underlying philosophical assumptions play a role in their failure is beyond debate, I believe.

A second major opportunity for fundamental governance re-invention followed the collapse of many communist states in the 1990s. To be fair, I should also point out that there was an opportunity, wholly missed, when communist states themselves were first created in the early 20th Century and then also following the Second World War. While there was some initial experimentation within the Soviet Union early on, the USSR ended up with a written constitution that, while different in many important details from the constitutions of capitalist countries, was nonetheless based on precisely the same epistemological and technological basis as the governments of 1789.

Marx and Engels were rather vague about what the world of communism would look like, once achieved, and had not focused at all on the structure of governance after the Revolution. As a consequence there was nothing in the canon of Marxist literature to guide Lenin and others, and so they unthinkingly borrowed the old bourgeois concepts and forms when they created the first and subsequent communist states.

And when many of those states collapsed in the 1980s and 90s, rather than taking the opportunity to imagine new forms of governance, old national forms and furies from the 19th Century arose to compete with the legal advisors from France, England, and the United States who rushed in and sold, all too successfully, their form of government to the former socialist states.

I was part of a small band of people who did our best to prevent this from happening. Led by Prof. Fred Riggs, a colleague at the University of Hawaii, we called ourselves "COVICO"--The Committee for Viable Constitutionalism". Primarily, we tried to get the citizens of former communist nations not to buy the dangerous "presidentialist" system of the US--a form that most often leads to military dictatorship, experience has shown. But we also tried to persuade them not to assume that parliamentary forms are the only alternative, either. "Let's rethink governance from the ground up on the basis of modern science and communication technologies", we argued [6].

But in vain. Our frail voices were drowned out by the money-fuelled bells and whistles of the constitutional lawyers from the American Bar Association and the Agency for International Development of the US State Department, and their counterparts in other Western nations with used governments to sell.

The third opportunity for governmental re-invention is now, and there are two parts to that opportunity. One part is the attempt by the sovereign nations of Europe to create some kind of a pan-European polity. Though the process is currently in hiatus, and certainly can fail entirely, I remain

optimistic about the emergence of a true European Union eventually. And I watch the process with interest--and great sadness [7].

While the literature of the attempt to create a European "constitution" is full of statements about "New Governance", I don't see any examples of truly new governance at all. I see a lot of interesting tinkering at the margins, but nothing that seems to exhibit a willingness to put existing and historical examples to one side and fundamentally to rethink what "governance" means, and how it can be achieved, given what current science tells us about the bases of human behaviour; given the challenges and opportunities facing humanity now and for the futures (compared to the challenges of 200, 100, 50, or even 10 years ago); and especially given the modern communication technologies that exist now or might exist, or could be created to exist for the purposes of evolving new forms of governance appropriate for the 21st Century and beyond.

And that is where you come in. You are the second part of the opportunity for governance redesign in the present. You are not only experts in governance. You are also experts in the use of electronic communication technologies for governing purposes, often called "e-government".

Almost all of the discussions I hear and reports I read about e-government assume the continued existence of the old forms and concepts of government, and just want to add ICT to the old forms [8]. While that is better than ignoring these technologies, it really is like adding electric lights to a horse and buggy: you might be able to see a bit farther down the road, but you are still in a horse and buggy, and not in an automobile, or a spaceship, or a teleportation transporter, where you could and should be instead.

Design Challenges Faced By The Us "Founding Fathers"

Let's go back to my comment that government was a great social invention of the late 18th century. What kind of an invention was it? That is to say, what design problems did the Founding Fathers of the US Constitution, for example, attempt to solve? I won't go into detail on all of them but here are some challenges that are illustrative of the rest the Founders had to solve [9]:

Challenge One:
The Founding Fathers believed that all men are self-centered sinners. So how can "evil" men govern themselves?

By the way, it is important to know that the belief that all men are greedy, evil creatures is a fundamental assumption underlying American government and political philosophy. It explains a lot about Americans, then and now. Since we assume the worst in everyone, we become what we assume, and so consider everyone who differs with us to be a terrorist (or a communist, or an atheist, or a European--depending on who are the popular sinners of the time).

So anyway, the first main challenge facing the American founders was how to have a government of men over men since all men are self-centered sinners.

The design solution was brilliant:

Design Solution One:
First, assume there is something called "political power." Then "separate" the power necessary for governance into three "branches". Then give specific pieces of power to each of three "independent" yet overlapping branches of government so that "selfish power will balance selfish power," and thus create social good. An extremely clever solution to a knotty philosophical or religious problem.

Challenge Two:
How can the thirteen colonies, now newly sovereign nations and with little experience of community among themselves at all, be persuaded to join into a closer political union?

Design Solution Two:
"Divide" "power" between the states and the central government. That division of power is now called "federalism" and was another clever solution to a perplexing problem of the time.

Challenge Three:
But how could the populous newly sovereign states be convinced to share power equally with the smaller, less-populated states?

Design Solution Three:
Create a national assembly--a Congress--that is composed of two "Houses," one in which the states have equal representation regardless of their population, and the other where the states are represented roughly according to their population size. Require that all legislation pass both houses before it can become law. Again, a great solution to a thorny problem.

Design Challenge Four:
Since there was no king, and kings were all that was known as chief executive officers of nations, what should be done?

Design Solution Four:
Since there was no such thing as a "prime minister" at that time, the Founders invented a kingly position that they called "the president". He was to be the "best man" in the nation and would serve as head of state for four years unless elected again.

Design Challenge Five:
But that solution immediately brought up another problem: how can a single "president" be chosen for the entire nation? Since the colonies forming the union had no history of political unity and there were no means for creating a national political dialogue at that time (and no great faith in "the people" anyway), how could the voters in the widely separated new states possibly know who was nationally the "best man" to choose for president?

Design Solution Five:
The founders reckoned that the people could not know who the best man nationally was, but the people would know who their local "best man" was. So the Founders stipulated that the people would choose their local best man, and these local best men from each state would go to Washington in the winter, after the crops were in, to choose, after discussion, the national "best man" for president and the second best man for vice president.

This turned out to be a very bad solution. While we have subsequently fixed part of the problem, we have left the fundamental flaw of a single presidency not directly chosen by a majority of the people entirely unchanged, and that bad design vexes us very frequently, as it does at the present time when we have a president most Americans don't like, but no routine way to get rid of him without automatically getting someone worse, as we would in this instance and most others.

And so on for many, many design challenges for which the Founders usually came up with very creative solutions for the time.

But what was the fundamental nature of their design challenges? What were the basic problems they were trying to solve?

"Communication" As The Design Meta-issue

I suppose there could be many answers to that question, but I ask you to consider that all of the challenges were about communication, and that their solutions were all ways in which communica-

tion could occur, given the intellectual assumptions and the technologies of the day. I repeat, "given the intellectual assumptions and the technologies of the day" [10].

And what communication technologies did exist at the time?

There were primarily two: either (1) people talking in places where people physically meet together, and/or (2) people writing on paper or parchment, either by hand or by the relatively new and cumbersome hand-driven technology called the printing press.

In the US of the time, there was no system of roads, rivers, or canals, nor anything other than sailing ships, horses, and horse-drawn buggies that could be used to exchange ideas among the inhabitants. There were no national newspapers or magazines, and few local ones.

There obviously was no such thing as electricity, radio, television, computers, or satellites.

Without the forms of transportation and communication available to us now, it made sense for the Founders to create a government based on the communication technologies of the time which required people to meet physically in a common place; to talk, argue, and decide; to enshrine their decisions in words printed on paper documents; and to have their decisions enforced by people acting on the basis of the printed documents which contained their decisions.

That made complete sense two hundred or more years ago. But does it make sense now? Does it make sense to continue to insist on electing people to go represent you in a physical place given the communication technologies of the present? I certainly don't think it makes any sense at all.

Does it make sense to enshrine decisions in printed words on paper instead of in pictures, or logos, or tactile and olfactory holographic virtual representations of forbidden or required behavior?

Or to enforce the laws by armed agents of the state instead of by electronic chips?

But in addition to not having the electronic technologies of the present available in the 18th Century, the founders did not have the knowledge resources we have either. No one in 1789 had heard of, much less thought the thoughts of, Charles Darwin, Sigmund Freud, Konstantin Tsiolkovsky, Albert Einstein, Norbert Wiener, Francis Crick, James Watson and Rosalind Franklin, Rachel Carson, Alfred Kinsey, Simone de Beauvoir, Carl Sagan, or James Lovelock.

In other words, every single design solution that we take for granted now as fundamental parts of the structure of government are there only because they were the best communication technologies available at the time constitutional representative governments were first created over 200 years ago.

And no one, as far as I know, has subsequently sat down, as the US Founding Fathers did in 1787, and asked, "how can we create a fundamentally new structure of governance given (1) modern and emerging communication technologies; (2) modern and emerging understandings of how humans behave and prefer to behave; and (3) the problems and opportunities facing humanity now and in the foreseeable future?"

I challenge you to be the people who become the founding mothers and fathers of new forms of governance for the new worlds ahead by asking and answering those three questions.

But wait: New worlds ahead? What might those new worlds be?

Anticipating "New Worlds Ahead"

I have been involved in futures studies for a very long time, so before I say something about what may lie ahead, let me say something about how to anticipate things to come.

First of all, I regret to tell you that it is not possible to predict the future. That is to say, it is not possible to say precisely what will lie ten, 25, 50 or more years ahead. So do not try to predict what will happen, and certainly don't believe anyone who says he can predict the future for you. Anyone who says he can predict the future just wants your money and will leave you to recover from the disasters flowing from the predictions.

Secondly, while it is not possible to predict the future, it is possible and necessary to forecast alternative futures. A forecast is not intended to be a prediction. A forecast is not necessarily a true statement. It is a logical statement; a contingent statement; an "if…then" statement.

And there is not a single future waiting out there to be predicted or even forecasted. Rather there are numerous alternative futures that we can and should anticipate by various ways and means.

But the most important thing about the future is that while it cannot be predicted, it can, in many significant ways, be imagined and invented. New forms of governance should be, among other things, ways by which humanity collectively imagines, invents, and constantly re-imagines and re-invents preferred futures.

Now in the time given me today, I can only touch on two of the many alternative futures lying before us.

Electronic Direct Democracy

You are all experts about the ways modern communication technologies are being used by governments today, which are primarily to improve agency and inter-agency information gathering, retrieval, and communication, as well as to facilitate communication between governments and citizens. I know you have given some thought to what increased communication between governments and citizens might mean for the future of elected, representative government in contrast with the possibility of electronic, direct democracy. I myself have spent a lot of time thinking, experimenting, and writing about electronic direct democracy, and I am all for it, especially if it is augmented by a system that allows each citizen to learn about, deliberate, and vote on any issue she chooses, and to delegate (and then recover at any time) that right to vote to a temporary, ad hoc representative whenever each citizen so chooses [11].

However, electronic direct democracy--that is to say, direct citizen participation in policy making--needs also to be balanced by effective citizen participation in all other aspects of governance as well, including the administration of policies, the resolution of conflicts (as citizens already do in some countries) and everything else. Direct democracy alone is certainly not likely to have much real meaning if direct citizen participation in all aspects of governance are not also fundamentally re-thought and re-formed appropriately.

People everywhere are expecting and demanding greater control of their own lives. It is absolutely clear that where the Internet is widely and easily available, and the content is uncensored, that more and more people are making decisions on their own without getting the approval of experts or authorities:

> If people--especially young people--want information, they go online and google their question. They do not go to a library, ask a librarian, or read a book.
>
> If they want to learn something, they ask their online friends or take an online class. They do not go to school and ask a teacher, unless they are forced to go by law or custom.
>
> If they are sick, they go online before they go to a doctor.
>
> If they have emotional problems, they go online and not to a psychiatrist.
>
> If they want a divorce, they go online, and not to a lawyer.
>
> If they want to shop, they go on e-Bay and not to a store.
>
> If they are spiritually curious, they form their own online religious communities rather than go to a church, temple, or mosque.

And you can be sure they avoid formal politicians and current political structures as much as possible.

But that is only the tip of a gigantic onrushing tsunami. When I say, "online", I am already being old-fashioned because opportunities for and reliance on interactive electronic communication technologies are springing up all around us like mushrooms after a rain.

Interactive electronic communication devices are becoming ubiquitous, increasingly intelligent, and able to anticipate our needs, feelings and wants. We can expect them to become even more an unknown, unseen, but irreplaceable part of our daily lives in the future.

A "Ubiquitous Society"?

I know that the idea of a so-called "ubiquitous society" (or "U-Society") is not new to most of you. There has been a lot of discussion about an emerging U-Society in Japan, Korea, Europe and elsewhere [12].

The Dutch futurist, Marcell Bullinga, recently described the significance of a U-society for future governance in an article titled "Intelligent government". By "intelligent government", Bullinga means not the intelligence of politicians, judges or bureaucrats, but the intelligence of implanted electronic devices that are taking over most routine decision-making tasks from humans:

> Making rules and enforcing them are important government tasks. Right now, laws are written down on paper and enforced by individuals. In the future, all rules and laws will be incorporated into expert systems and chips embedded in cars, appliances, doors, and buildings—that is, our physical environment. No longer will police officers and other government personnel be the only law enforcement. Our physical environment will enforce the law as well.
>
> Innovations in government will enable us to have a safer environment for law-abiding citizens because built-in intelligence in our environment will minimize fraud, global crime, pandemic diseases, accidents, and disasters. Law-abiding citizens will gain privacy, while criminals will lose it [13]

I am not sure that the "intelligent government" of a ubiquitous society will be quite as benign as Bullinga suggests since power-seeking individuals will still program the electronic chips. A student of mine at the University of Hawaii, Jenifer Winter, was awarded a PhD for a dissertation she defended in 2001 on the social implications of ubiquitous computing. Using a modified Delphi technique, Winter discovered that most people basically liked the idea of ubiquitous computing, but were very concerned about the security issues--especially the ability of governments and businesses to spy on individuals [14]. In contrast to Bullinga, they were concerned about the end of privacy as a concept and a possibility. I spoke with Dr. Winter a month or so ago, and she said that since 9/11 and the enactment and extension of the PATRIOT Act in the US, and then more recently the Military Commissions Act, the intrusions by government that her respondents feared have increasingly become frightening reality in the US.

However, a ubiquitous society is only one aspect of a much larger and more powerful set of interacting and merging processes. For example most current discussions of a U-Society focus only on electronic communication technologies, ignoring the emerging role of biology, biotech, genetic engineering, and the like. The basis of ICT in the 21st century (and the most important technologies of the 21st century overall) are probably not going to be based on electronics alone. They are more likely to be based on biology, alone or in combination with electronics and nanotechnology. The information of life is the most important information of all. The communication that goes on between molecules, neurons, cells, and other basic biological components can and almost certainly will be used for social and political communication purposes at some point in the foreseeable future, and discussions of the futures of ubiquitous societies need to include that possibility.

This is not a new idea. One of the early observers was Susantha Goonatilake, a futurist from Sri Lanka, who had been discussing this for a over decade before putting it all together in Merged Evolution: Long-Term Implications of Biotechnology and Information Technology [15]. Goonatilake sees the coming merger of biology and electronics (and of cyborgs, artificial intelligence, and their environments--and indeed merger of life and nonlife) into a true "information society". I very much agree.

More recently, the American futurist, Ray Kurzweil, has written an extremely popular and influential book titled The Singularity Is Near: When Humans Transcend Biology [16] in which he proclaims that the merger Goonatilake foresaw is approaching very rapidly.

So it may not be simply that ICT will ubiquitously surround humans. Rather, the main point may be that humans, and their technologies, and the environments of both, are all three merging into the same thing. Humans, as humans, are losing their monopoly on intelligent life, while new forms of artificial life and artificial intelligence are emerging, eventually perhaps to supercede humanity, while the once-"natural" environments of Earth morph into entirely artificial environments that must be envisioned, designed, created and managed first by humans and then by our post-human successors.

To be clear, the merger of electronic communications technologies with biological communications technologies is simply part of the rapid transformation of both the once-natural environment and the human-built environment into an entirely artificial environment while at the same time homo sapiens (and all once-natural life forms) merge, through natural evolutionary process as well as conscious genetic engineering, into that new artificial environment so that it will be impossible to perceive any one of them (humans, posthumans, artilects, the natural environment, and the artificial environment) without also seeing all the others at the same time.

This is true ubiquity.

And here we are, stuck with 18th Century governance forms and ways of trying to understand and guide these mighty tsunamis of change rushing towards us from the future. To say that fundamental governance redesign for such a world is essential is to understate the matter considerably.

I challenge you to be leaders in helping humanity address and guide the emergence of these transformational possibilities that current and new communication technologies may bring.

But of course such a future is not inevitable at all.

A "Survival Society"?

In spite of everything I have just said, this transformation is only one possible future from among many. There are numerous alternative futures.

I will call your attention to only one more, but one that I think very urgently also demands your greater attention.

I am extremely concerned that the combined impacts of global warming, climate change, sea-level rise, and the effective "end of oil" before plentiful, cheap, renewable, and "green" energy alternatives become available may soon force humans to drop their focus on the wonders of ubiquitous electronics, and to struggle with all our might to survive and thrive in a world that will have to become very dependent on basic human labor and face-to-face forms once again.

While global concern for these environmental and resource challenges is rising, many of the most important global players such as the US, Japan, and China, lag well behind. And, since futurists like myself have been trying to get political decision-makers to address these looming issues for the past fifty years without significant success, I am skeptical that humanity will address them in time to prevent serious social dislocations. It is much easier to envision a catastrophic future than a bright one, in this regard.

Moreover, to focus on another perspective entirely, I observe that our global neoliberal economic system with the American Empire at the center is built on such a fragile and growing base of national, corporate, and consumer debt that the slightest tremor might bring the entire global financial house of cards tumbling down, engulfing the world in a prolonged economic depression.

China, India, and/or the European Union might nimbly leap over the crumpled United States, and become the dominant drivers of a new world economy, but if both of these challenges occur at the same time--both global economic meltdown AND novel and overwhelming environmental and resource challenges--then we probably can just kiss the dreams of a ubiquitous society goodbye and turn our attention to very basic matters of survival again [17].

Conclusion: Begin Significant Governance Re-design

My basic message today is that, while it is not possible for me or anyone to say confidently what the future will be, I can say confidentially that it is not likely to be business as usual. Humanity is indeed faced with many unprecedented challenges and opportunities.

At the same time, my message is that the human invention that should be addressing these problems and possibilities--formal institutions of government--are among the most ancient and obsolete of all current institutions. Devised in the 18th Century in order to address 18th Century problems with 18th Century ideas and technologies, no government in the world today has been fundamentally re-envisioned and re-invented to address the problems and opportunities of the immediate or longer range futures.

Thus, humanity is left adrift as mighty social, intellectual, environmental and technological tsunamis race towards us.

But there is hope--and I am looking at it: you are the hope of future generations. I flew all the way from my little grass shack in Hawaii to urge you to become the founding fathers and mothers of new forms of governance for the 21st Century and beyond. It is your responsibility and opportunity as parliamentarians from around the world deeply aware of how electronic communications technology can be used for governance.

I urge you as strongly as I possibly can to accept my challenge, and to use the short time you have at this conference to begin a worldwide process of governance reinvention on the basis of current and emerging communication technologies and ideas. I want to see such a powerful and inspiring Helsinki Declaration of Interdependence emerge from this meeting that the old European philosophers and American Founding Fathers will be green with envy and admiration.

Your ancestors, and all future generations, are watching you. Do not disappoint them.

FOOTNOTES:

1. I am indebted to Stuart Conger, "Social inventions," The Futurist, Vol. 7, No. 4, 149-158, August 1973, for introducing the concept of "social inventions" to me.

2. For more details, see, Harvey Wheeler, "Constitutionalism," in Fred Greenstein and Nelson Polsby, eds., Governmental institutions and processes, Handbook of Political Science, Vol. 5, Reading, Massachusetts: 1975

3. Ted Becker and Christa Slaton, Quantum politics: Applying quantum theory to political phenomena, Westport, Conn: Praeger, 1991; and Lyn Carson and Brian Martin, Random selection in politics, Westport, Conn: Praeger, 1999

4. Brian R. Greene, The elegant universe: Superstrings, hidden dimensions, and the quest for the ultimate theory. New York: W.W. Norton & Company 2003 and Michio Kaku, Hyperspace: A scientific odyssey through parallel universes, time warps, and the tenth dimension. Oxford: Oxford University Press, 1994. In contrast, see, Peter Woit, Not even wrong: The failure of string theory and the search for unity in physical law. New York: Random House, 2006

5. Jan Huston, A passion to evolve. PhD Dissertation, Honolulu: University of Hawaii, 2000

6. For more information on COVICO, see <http://www2.hawaii.edu/~fredr/welcome.htm#covico>

7. Gráinne de Búrca and Joanne Scott, ed., Law and new governance in the EU and the US. Oxford: Hart Publishing, 2006.

8. For examples of parliamentarian's interests in communication technologies and parliamentary government see, "Parliament and Democracy in the 21st Century," A Preliminary Report by the Inter-Parliamentary Union, New York, 2005; "IST for Parliamentarians," <EPRI_Study2_D102_revised_V2.pdf>; "E-Democracy Survey," <www.e-democracy.gov.uk, www.epri.org>; "A new agenda for e-democracy" < http://www.oii.ox.ac.uk>.

9. For more details, see Mika Mannermaa, Jim Dator, Paula Tiihonen, Eds., Democracy and futures. Helsinki: Committee for the Future, Parliament of Finland, 2006; Jim Dator, "Civil Society and Governance Reform," in Jim Dator, Dick Pratt, Yongseok Seo, Fairness, Globalization, and Public Institutions: East Asia and Beyond. Honolulu: University of Hawaii Press, 2006; James Madison, Alexander Hamilton and John Jay; edited by Isaac Kramnick. The federalist papers. Harmondsworth: Penguin, 1987 (originally published 1789); Ralph Ketcham, ed., The Anti-Federalist papers and the constitutional convention debates. New York: New American Library, 1986; Charles A. Beard, with a new introduction by Forrest McDonald, An economic interpretation of the Constitution of the United States. New York: Free Press, 1986, (originally published 1935); Robert A. Dahl, How democratic is the American Constitution? New Haven, Conn: Yale University Press 2003, 2nd ed.

10. The concept of governance as primarily concerned with "communication" was explored by Karl W. Deutsch, The nerves of government. Models of political communication and control. New York: Free Press, 1963

11. On electronic direct democracy, see, Ted Becker and Christa Slaton, The future of teledemocracy. Westport, Conn: Praeger, 2000

12. For discussion of a Ubiquitous Society see:

Ubiquitous Network Society <http://www.itu.int/WORLD2006/forum/society.pdf>; Mika Mannermaa," Living in the European Ubiquitous Society" for the conference "I2010 – Towards a Ubiquitous European Information Society" <http://ec.europa.eu/information_society/eeurope/i2010/index_en.htm>; Rho Jun–hyong, "Dynamic Ubiquitous Korea--Progress and Strategy for Success," < http://www.ica-it.org/conf39/>; Hajime Sasaki, "Toward the Realization of a Japan-Initiated Ubiquitous Society <http://www.nec.co.jp/techrep/en/r_and_d/a04/a04-no1/a63.pdf>

13. Marcell Bullinga, "Intelligent Government," The Futurist, July-August 2004

14. Jenifer Winter, "Increased Public Involvement in Technology Policy: Focus on the Pervasive Computing Environment". ACM Computers and Society: selection of best papers 2004-2006, 36(3), 2006. 49-57 and Jenifer Winter, Early Identification and Evaluation of Emerging Problems Related to Ubiquitous Networked Computing & Communications in the State of Hawaii. Ph.D. Dissertation. Honolulu: University of Hawaii, 2003

15. Susantha Goonatilake, Merged evolution: Long-term implications of biotechnology & information technology. London: Gordon & Breach, 1999

16. Ray Kurzweil, The singularity is near: When humans transcend biology. New York: Viking, 2005.

17. For sources on a "Survival Society", see:

Kenneth Deffeyes, Beyond oil: The view from Hubbert's Peak. Hill and Wang, 2005; Paul Ehrlich and Anne Ehrlich, One with Nineveh: Politics, consumption, and the human future. Washington: Island Press, 2004; Tim Flannery, The weather makers: How man is changing the climate and what it means for life on Earth. New York: Atlantic Monthly Press, 2006; James Howard Kunstler, The long emergency: Surviving the converging catastrophes of the 21st Century. Atlantic Monthly Press, 2005; Dennis Meadows, Jorgen Randers, and Donella Meadows, Limits to growth: The 30-year update. Chelsea Green Publishing, 2004; Daniel Quinn, Beyond civilization: Humanity's next great adventure. Three Rivers Press, 2000; Martin Rees, Our final hour: A scientist's warning: How terror, error, and environmental disaster threaten humankind's future in this century--on Earth and beyond. New York: Basic Books, 2003; James Speth, Red sky at morning: America and the crisis of the global environment. Yale University Press, 2004

Can Global Information Society Sustain Egalitarian Democracy?

Mr Risto Linturi, Chairman R. Linturi Plc

Distinguished audience,

We used to live in a hierarchical world where kings, queens, prime ministers and presidents each ruled strongly in their own areas. Now the world has become chaotically complex. Total is more than sum of its parts. Many of our current technologies have spread because they support powerful ideas of easy interaction between all the worlds' people. Disturbances spread equally easily.

There are changes for the better and changes for the worse. I will illustrate some of the changes – what new questions arise, what possibilities and threats we face? Some problems are global. Schedules and consequences differ in different cultures and economic situations. My viewpoint is western and narrow.

I will concentrate on technology. It is certainly not our brain that has grown so fast. Most hunter gatherers in New Guinea used to know well over one thousand useful species and plants, where to find them, how to hunt and prepare them and when and how to use them. This is a huge volume of useful information. Way more than my old biology teacher knew of anything. Most academic people in industrialized societies never learn so many useful topics thoroughly. It is not that we now know more than before as individuals. We certainly survive and even get rich with far less information than ever before. You only need one talent.

Adam Smith laid the foundation of today's market economy. His theory has it's faults but productivity does grow with specialization and exchange. 25 years ago I designed a microcomputer and programmed its operating system. I was a specialist who knew the whole area from top to bottom. Today that is impossible. You need at least ten best specialists in Finland to cover the same area because the complexity has grown. Specialization does destroy traditional market when products become complex and differentiate. Comparison becomes impossible. This is why economists now talk so much about trust and social capital and social networks.

But anyhow - we are productive because we specialize. Jointly we know much more than ever before. Individually I am afraid we easily lose sight of the whole. There is increasingly much information that we cannot handle and understand. We leave decisions to specialists, but they do not understand the side-effects. Everything is connected and there are no renaissance-men any longer. It is easier than ever to make colossal mistakes. Both specialization and efficient infrastructure lead to this.

Let us visit ancient Greece. It can be debated whether you could call it democracy, if only landowners got to vote. But this was not the only difference. They initially thought that people should decide common things together, nobody should have power over them. People who did not attend the meetings to share their situations were called idiotiko. Today that means private in Greek. How can you decide what is mutual interest if you do not know the mutual situation. You just guess how others really feel and you end up having to live in hypocrisy. Privacy is quite high in just the same countries where hypocrisy is high. But let us continue one brief moment with the Greeks. Philosopher Plato was very good at manipulating words. He got his money from tyrants of many small Greek states. He trained their youth. He proposed that the real question is how to select the one who

decides. But can you really call it a democracy if you select a tyrant every four years? Democracies around the world seem to have very different answers to this question. And very few places allow us to group freely to decide our mutual destinies. We all have laws against treason or blasphemy and we all want to decide how other people lead their lives.

Capital-intensive industrialization in market economies is not possible without advanced book keeping methods and stock market. Tax collection, citizenry, intellectual property right system and various other systems would have been impossible to enforce without relatively advanced information handling methods. New technologies do not only build societal structures. They also aid in dismantling old constructs. Totalitarian systems have become harder to maintain as practically every place around the world can be connected to worldwide communication. Synchronized mob movement against oppression is easier than ever before.

In 2020 computers and networks will again become thousands of times faster. All the million movies ever produced will squeeze in my new home computer. Applications will be smart enough to learn as they go. Emotional algorithms are under intensive study and it seems possible that computers both recognise and project emotions and even utilize emotions to enhance their own learning capabilities and simplify their goal-seeking algorithms. Satellite positioning systems, walking talking robots, flying and spying robotic bombs and satellite imaging will fundamentally change our lives and behaviour patterns before I retire.

Genetic engineering is currently taking its first steps. Technologies will develop rapidly, and by 2020 a large body of useful - and less useful - properties of plants and living organisms will have been harnessed for human application. The organic world offers a myriad of opportunities - plants and creatures that can detect and produce electricity, change their skin colour, breathe in water, shine in the dark, and produce an endless supply of chemicals and objects of hard and soft materials. Many of these capabilities will be harnessed and used as building tools, peripherals and platforms for future ICT systems. Genetic will also be produced easily. Hopefully we learn fast enough to cure the problems these will cause. They cannot be prevented.

Materials sciences, nanotechnology and many other branches will develop astounding new applications just as the biotech and information sciences, but the most mind-blowing changes will come out of cross-fertilization between the various disciplines. Technology will be developed above all to meet economic and societal needs. Hence it is also important to understand that the greatest impact of technical advance is a catalytic one. The structures of the economy and of the society - even of our individual values - will alter as a consequence of technological change. You may wonder if some of these issues are too far out, or if they will affect only the most developed nations. When I visited Tanzania I noticed that digital calculators are cheaper than pencil and paper. Mobile phones are cheaper than landline phones. Perhaps biotechnology likewise becomes cheaper than the old energy intensive chemicals. That might save us from global warming. But let us now return to the past.

When society stabilized enough to limit the use of violence, the best way to acquire great wealth was trade. Information flow was slow and erratic. Trading empires controlled the information flow and largest part of transport. Investments concentrated into these activities from Caesars time to Napoleons time in European history. Only after public communication routes were opened and public transport became available the rules changed. One hundred years after Napoleon, trains fared all across Europe hundred kilometres per hour; telegrams were getting popular.

Manufacturing gained importance and became better means to make profit than trade. Humankind turned its attention to studying better manufacturing methods and products and power shifted to cultures whose customs and communications methods were better suited to investments in industrialization than trade.

Now again our communication system has evolved much beyond any expectations. Corporations are valued for their expected future earnings, and wealth is acquired by interpreting early warning signals and changes in those future expectations. Globalization, standardization, increasing co-operation between networked companies, and fierce competition has decreased profits in manufacturing.

After Berlin, walls are breaking everywhere - and without protective walls you have to be more efficient or sneaky. Otherwise you lose your customers, citizens or employees and finally your investors and your job. Ideas have now almost a free market. This used to be different. I used to fight against invisible walls just dozen years ago – it was possible to get ample funding in Finland for your idea only from big corporations. We had no option economy and no real independent risk funding. Corporations held economic power within their fields and they did not want change. Free market is a frightening thing, but it does not just create inequality, it also may remove problems and empower those who have good ideas. Money is no longer associated with power only. It may combine with productivity, creativity and vision.

One of the most fundamental trends is that costs related to all sorts of market transactions continue to decrease. Mobile phone and internet are still causing turmoil in such countries that have suppressed information flow.

As ideas now move across boarders and also material exchange is easier than ever, we have increasing pressures to harmonize various socioeconomic rules across the globe. Another aspect comes from the theory of chaos. David Ruelle has compared economic development to a liquid that is heated. We increase dynamics by lessening friction. It is ever faster to re-organize as transaction cost gets lower and lower. Simultaneously with new productivity increases we are increasing energy in the society thus doubly accumulating potential for turbulent behaviour.

We can see the turbulence now clearly. Some areas rise like skyrockets and some are totally chaotic. Terrorists move easily, use highly productive weapons in societies that cannot defend themselves any better than spearmen against armoured horsemen. Some societies are very productive and some areas very weak; if travel is easy we will see increasing turmoil in those weak areas and it acts as safe heavens to turmoil. EU has one strategy with its neighbouring countries. EU is trying to minimize income differences in neighbouring countries. This may not be enough as the problem clearly is global. But it is also evident that the current global American strategy is not useful.

Internet and mobile phones have enabled easy collaboration between people around the world. There are remotely operated machinery allowing remote telework even in such delicate jobs as surgery. Robots are being developed, which handle simple situations autonomously but allow human remote intervention in case of complicated situations. Combined with virtual reality, these robots allow their operators to be present in dozens of places almost simultaneously.

As mobile communication has become commonplace it is not longer difficult to set up sensors and other monitoring devices on self-moving platforms. We can gather information from almost anywhere and every field of life. The newest mobile phones have enough memory capacity to store several weeks' worth of speech and few hours' video information. DNA analysis is almost cheap enough for individual usage and everyday practice in criminal laboratories. We have all become potential detectives and we can publish our findings anonymously through the Internet. Information is abundant and it is easier to acquire than ever before. People check backgrounds of each other before meetings. Most of us have been mentioned in some web pages. And if we have not, that is also suspicious.

We used to think highly of our own mental capabilities. Chess computers, neural networks, genetic algorithms and their applications in various fields have made it apparent that computers are capable of both deductive and inductive reasoning, experimental learning, pattern recognition and goal seeking functions. Google news - computer edited real time news, could fool almost any reader to believe that a professional news editor has selected the news and edited the front page. We see continuously new areas where computers do the analysis and reasoning that used to be appointed to highly esteemed and experienced individuals. Within the next decade we will see household robots that recognise and react to emotions.

With nano crystals we get digital tattooing to enable tattooed wristwatches, pulse meters or compasses. A tattooed emotional snake might also be very popular.

Some enhancements will enable us to recall everything that we ever heard and very soon everything that ever was spoken in the radio or television. With future speech recognition and mass storage this will be almost as easy as searching for web-pages or email for indexed key words. We will

also be able to see and hear things that do not exist. Street signs can be removed when they can be shown on our virtual glasses or on the windshield.

All these networks and information appliances have made it easy to acquire information and employ experts. More and more of the value of products turn out to be bits. Copying is very cheap with machines but intellectual property rights protect the monopoly of the inventor. Creativity has become one of the key success factors - creativity and sensitivity to the needs of others and the networked structures of our society. This will increases pressures for and against the intellectual property rights as they maintain artificial division of wealth in favour of the first inventors and their associates. The crucial core of free trade is actually enforcement of monopoly rights.

Creativity drives currently against hierarchical and mass market structures. In this new culture everyone's creativity and individual identity is appreciated. Nokia was the first major company to follow Alvin Toffler's advice and allow its customers to take individually part in product design by deciding what ringing tone and what cover art and even what features they would prefer. Nokia phones almost resemble the other famous Finnish originated phenomenon, Linux, which allows you to design your own operating system features to be included in the next global release for everyone to share. This is very different culture to the previous careful product designs where nobody was allowed to tamper with the grand designs.

In our self-organizing world nothing usually happens unless people get interested and decide to join in. Internet was such an idea. I used to promote networks by showing I could answer my doorbell with my mobile phone when travelling. Few years ago it was also nice to joke about looking inside my fridge with my mobile phone. Today those visions have used up their strength. It is quite common in Finland to pay your parking, tram, carwash or movie with your mobile phone.

I believe that all digital media could be symmetrical. Someone wants to put a camera in front of her goldfish bowl. There might be more than ten people who would like it much better than what comes from the TV. Someone else might send an email to all members of the MG club to say that he will change his carburettor at six pm. The most widely spread Finnish movie, a parody of Star Trek was a hobby project. Many musicians have risen to fame distributing songs free in the internet.

Sadly the regulator jointly with operators lead development to a hierarchical direction. All technological issues have their consequences. Some technologies are basically egalitarian and some others are hierarchical. Huge investment into digital tv is one example of these misguided visions. If the same amount of money would have been invested to internet television, anyone could have had their own tv-stations. Now we have only few companies who can decide what is worth seeing in the tv.

Alvin Toffler started his visionary book: "The Third Wave" followingly: "A new civilization is emerging in our lives and blind men everywhere are trying to suppress it!" But this is not just a question of being blind to change. Very often those in power are afraid that they would lose their positions if things change. It may be that we should run and not fall behind. But blind men do not run very fast.

Jules Verne started writing science fiction in 1860's. He wrote about Paris one hundred years in the future. He saw that streets would be full of cars. But he also saw that industrialization would make us faceless. Verne saw that faceless ownership through shareholding system and corporate production systems would rob us of many basic values that hold the society together. This same concept was repeated by many philosophers some one hundred years ago. Charles Chaplin demonstrated it very well in his movie The Modern Times.

Francis Fukuyama shows statistics in his book "The Great Disruption". He shows how in the years of information technology – crime has increased fifty fold in United States and twenty fold in many European countries. Societal norms are breaking.

There is something in this industrialized information technology that is not good for us. Alvin Toffler analysed in early eighties what Verne predicted. Hierarchical information structures make

individuals lose much of their significance. People become anonymous and their actions are invisible to others but their boss.

Fukuyama saw statistical signs of things turning better lately. He did not offer any good explanations. But New York Times foreign columnist Thomas Friedman explained in his book about globalisation "The Lexus and the Olive Tree" many recent phenomena connecting them to the advances of the Internet and transparent society. He saw that hierarchies are breaking, mostly to a positive end result.

But let us think about wider issues. Internet is often referred to as a global village. It is easy to find new business acquaintances and start co-operating. This fast paced networked business model requires a similar model of non-hierarchical trust that existed before the industrial revolution. If you are a bully I will easily find it out from rumours in the Internet. If you are a good guy, I can trust you and do business with you without long contractual negotiations. It seems that a good mechanism for rumours helps businesses to network. Privacy and secrecy decreases feeling of trust.

It seems that there was not enough positive feedback for trust and honour in our western industrial society. For that reason we shifted towards hedonistic values and selfish behaviour patterns. All ill deeds were handled according to the hierarchical organisational routes and absolute privacy was considered everyman's right. This suited the industrial society and mass marketing but it does not match the needs of our networked era. It is questionable whether honour has any meaning if you cannot lose it in the eyes of your fellow beings. Government is not our mother.

As information technology decreases transaction cost, decreases cost of distribution and copying there is a major shift in organisational productivity. Well-informed, creative individuals become more valuable compared to people who obediently follow their bosses' instructions. These empowered employees are also more satisfied with their lives. But naturally this is a risk for those in power. And there are other risks as well when you give powerful new tools to ordinary users. Computer users can create huge damage as we have seen too many times with computer viruses.

You know that there is a serial number in each bank note. Also the cars and guns have identification numbers. Power over others and accountability must go hand in hand. There is however a complex issue with privacy. Many people are afraid of big corporations and their own government who might misuse their personal information.

In Finland organizations are not allowed to collect private information – very much opposite to what has been the case in USA. Perhaps due to this, people in Finland are not commonly afraid and do not wish for a complete anonymity. They understand that anonymity for everybody would include criminals. I have been promoting a solution where the net would save tracing information in such a way that it could only be used if several organizations co-operate. And simultaneously corporations and the government were to be restricted so that they could not abuse the information. This would help to catch whoever broadcast copyrighted material illegally or sent nasty viruses or a blackmail letter to me. There would be balance and trust without a need for web spy agencies who work in secrecy, only for themselves and those in power.

Internet task force has informed that forthcoming versions of Ipv6 would include mechanisms for tracing messages to individual machines. This might mean licence plates and this should mean full support for strong encryption and a worldwide legislation to ban corporations and governments from collecting extensive user information into their databases without users' approval. This would create a balance where networks would be safe and everybody would equally get information on others - no big brother but small brothers peeking from every possible hole. Just as in small villages, where doors could be kept unlocked and corruption would have no hierarchical structure to turn to.

Internet enables us to do many things in a new way. Simultaneously, it threatens a multitude of old structures and concepts. Let us return to the two most important concepts in politics: the state and democracy. A state is a power structure inside a geographically limited area. The power is financed by collecting taxes from events inside the state boarders.

But more and more of our wealth and activity has transformed into bits and bits - they know of no boarders. Bits move freely in virtual reality and nobody knows where they go or come from. Individual freedom is growing - I might work, I might spend or earn money - nobody knows. Local governments rule less and less of the activities of their citizens. They collect less and less taxes from what happens inside their boarders because bits are not local and they will easily find tax heavens.

Naturally we solve part of this problem by joining forces with all other states and by enforcing taxes and legislation with international agreements. We might actually form a world state for virtual reality. But what then happens to democracy and individual freedom - what is individual freedom and democracy when bureaucrats across the world state create rules and the so-called free market handles all executive tasks in the non-local virtual realm. Democracy works best in small communities where people feel that there really are common problems to be addressed.

I have wondered if there could be such a thing as a democratic virtual community with its own set of responsibilities and rights similar to physical communities inside every larger state. It would be an intriguing thought as more and more of our common problems and activities are common with people outside our physical realm. Currently the citizens in virtual reality feel pretty much like they lived in someone's back yard where their landlords set all the rules and limitations.

I have also wondered if the Internet could be a democratic virtual realm whose constitution would be under the jurisdiction of UN. Internet community could register as residents, they could vote and they would have basic rights as we have in the physical states even when we visit someone else's property. This is s strange idea only if you are too much bound by geography. It is not more than few hundred years ago when we had several states that had no distinct geographical boarders. Hansa-alliance was one and Burgundy was another but clearly Assyria and several older states were not ruled by boarders but by hierarchical social networks. I am certain; Current Wild West practice in the Internet might change, if it was clearly governed by those who wish to live there.

It seems popular nowadays to claim that information technology will enhance the gap between the rich and the poor. Some talk about rich and poor countries, others about individuals and families. Basically I tend to agree with the late Milton Friedman. Generally, technological advances have favoured the poor more than the rich. Emperors did not need running water, they had running slaves.

All around us we see people and countries, which are falling behind while others seem to get more and more ahead. This would prove something if it were not a false vision. Perhaps we tend to forget that while this world becomes unjust to some it simultaneously becomes fairer to many others. Many developing countries are showing stronger growth than industrialized countries. One could also see many signs of old power structures falling and a more egalitarian society emerging.

There are few important principles, which guide major changes in today's economic structures. A greater portion of the value of goods and services consists of bits than ever before. This part of value chain may exist practically anywhere. This increases value of skilled labour in developing countries. This is seen in statistical numbers of many developing economies. Large part of export i.e. from India is bits.

The law of increasing return plays a role in the digital economy as production cost and distribution cost approaches zero. You can think about one fax or one Internet browser. By themselves they are worthless. They only become useful when enough people start using them. Due to this principle many companies give away very much of their products practically for free to get high enough number of users for a healthy user community. This does not show in statistics as anything free is worth nothing.

Few other trends are also noteworthy when thinking about the digital divide. All sorts of transaction costs are decreasing because of information technology. This leads to outsourcing because big corporate hierarchies do not any more offer advantages and their inherent slow reaction times are more harmful than ever. Also governments outsource old hierarchical structures. Pension funds, individuals and venture companies search continuously for good ideas all over the world in order to

invest in them. In order to get working capital companies need to be open and reliable and much of the same goes also for states.

There are many confusing signs as several socioeconomic structures change. However it seems clear that every government who seriously thinks about productivity in the global marketplace should put effort in creating possibilities for all citizens to get useful education. There used to be a time when citizens were kept in ignorance in order for those in power to stay there. In today's society most rulers realize that this path leads to weakening economy. Outside totalitarian regimes weakened economy usually leads to a change in government.

Distances lose their significance; information delivery becomes much cheaper through the networks than through physical means; new technology starts empowering people all over the world. It seems inevitable that many developing countries get to take part in global affairs.

When we think about inequality from the individual point of view, we will see some people get rich from very poor surroundings and spreading those riches around. Many will also get poorer in the rich countries as labour will compete globally. Differences between various areas will lessen but differences within any particular area might stay high and even increase. This is seen now all over the world. Reason for the greatest income differences are structural and could be corrected by politicians. I claim the largest single reason for inequality in market economy is intellectual property laws. Other reasons are comparable limitations to competition. Without these structural rigidities and limitations, our personal differences would not amount to such huge income differences.

It can be shown mathematically and historically that static structures increase income differences and slow down growth. Dynamic structures reduce income differences and increase growth. But sadly dynamic structures also increase insecurity. It may well be that many slaves felt secure and Plato did manage to prove that class society is very stabile. Stability and security should not be our main drivers. We cannot be governed with fear, freedom and self governance is risky but worth it.

If all the positive benefits of networking could be harnessed – developing nations could prosper and sustainable growth could be reached as much of the material production can be replaced by virtual systems with decreasing energy consumption.

Presententation of Finnish System of Higher Education

Ms Katariina Raij, PhD Director of Well Life Center, Laurea University of Applied Sciences

IPAIT VISIT TO Laurea's Well Life Center (WLC) which represents a new type of integrating higher education and R&D- activities in the welfare sector

Well Life Center as an example of Finnish professional higher education – From Welfare Ba to Well Life Center

In this part a short description is presented of how the idea of Well Life Center (WLC) came about and how it became possible to construct it. The development of WLC continues.

Referring to my own studies (Raij 2000, 2003) professional expertise is found to be built of knowing (evidence based knowledge), understanding, and doing and situation management. The orientations of professional competence building are identified as doer's, client's, researcher's and working processes' orientations. The concept orientation, in this context, is defined applying Boekaerts' (1996) description as the way a person perceives the phenomenon of learning in the meaningful way. The types of knowledge in professional competence building, in turn, are identified as 1) theoretical knowledge, 2) knowledge embedded in skills and abilities, 3) moral knowledge and 4) experiential knowledge.

Knowledge creation within an enterprise is studied by Japanese researchers (e.g. V. Krogh, G., Ichijo, K., Nonaka, I. 2000). They have introduced the idea of a meeting place (Ba), identified by Nishida, Japanese philosophy, as a physical, spiritual and virtual place. In meeting middle-up-down people, in an enterprise, have a possibility to explicit tacit knowledge by sharing their experiences. Interaction leads to create new concepts, improve and accept the meaningful ones and then duplicate new knowledge to a larger community.

By applying the idea of a meeting place (Ba) to my own research findings, mentioned above, it was possible to construct the theoretical frame for the concept of the welfare Ba. One of the questions which this raised was who were supposed to meet if we wish to create new professional, welfare related knowledge? The answer was found from the orientations of professional competence building as welfare doers, researchers, clients and service processes. In this way the types of knowledge in professional competence building are also present. Where do they come from? They are to be found from the public -, private - and the third sector, and from higher educational institutes. Participants bring their own clients as well as their activities with services to be present in the meeting place. A value base, in turn, to the welfare Ba was identified by answering to the question what we are working for in the welfare sector. We all aim at a human being's good.

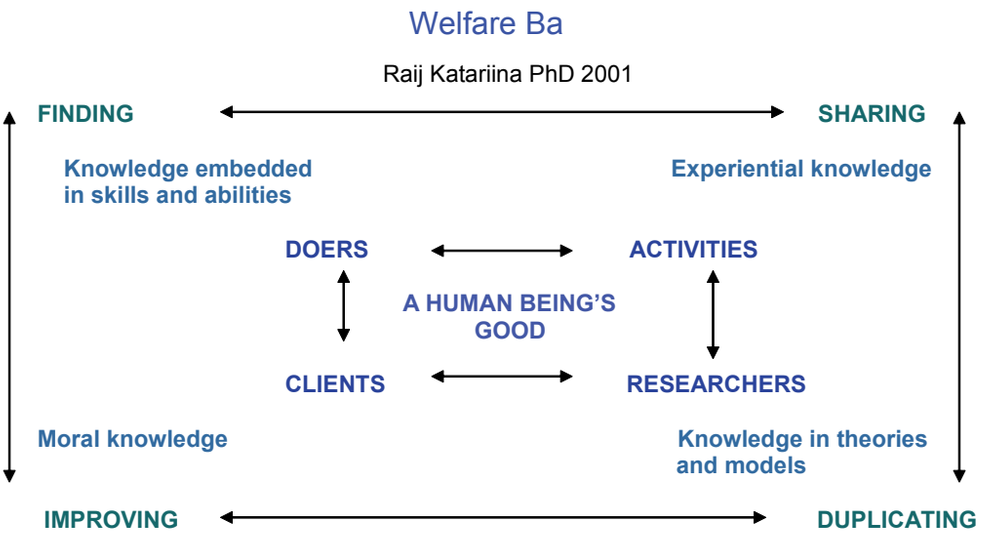


Figure. Welfare Ba where welfare doers with their clients, activities, and welfare researchers (Raij 2000) create new professional knowledge by sharing, finding, improving, and duplicating (e.g.Nonaka 2000)

Meanwhile Espoo City (the second largest city in Finland) presented its own strategies where significant expectations of the integration between welfare, technology and business were strongly expressed. When the proper building also was found, it was possible to begin constructing an innovative environment for the creation of new, welfare related, professional knowledge. The latter are identified as innovations (products, working models and working culture) where welfare knowledge, technology and business are integrated. The value base, a human being's good, provided a guide for formulating the name "Well Life Center" in 2004. By 2005 all the participants representing higher educational institutes as well as public -, private - and the third sector organizations with welfare -, technology - and business competences were found and located within the WLC.

The WLC is coordinated and run by the Laurea University of Applied Sciences. The tasks described in the Polytechnics Act (351/ 2003) include: higher education that responds to the world of work and its developmental needs, and is based on research and artistic principles; applied research and development work that fosters regional development and takes into account the industrial structures of the surrounding areas; and support for individual professional growth. According to these tasks, universities of applied sciences are closely linked to the world of work and therefore rooted in praxis. Scientific demands are related to pedagogy as well as to research that develops the working life and supports regional development. Demands for professionalism are evident in the idea of professional expertise based on the world of work and its development needs, and in the requirement for individual professional growth.

Professional knowledge creation as new innovations in the WLC

In the following section, the ways of creating new professional knowledge are shortly described with the facilities which are developed in the WLC.

In Finland, as in many other countries, increasing health care and social welfare expenses are seen as a challenge. Finland is a rapidly aging society with increasing demands for welfare services. A future challenge can also be seen in a gap between the increasing number of care receivers and the decreasing number of care givers. This is why new solutions are needed. More efficient productivity presupposes innovative technological applications. In the WLC technology, innovations and the production of public services can be integrated and also the need for new social innovations has been taken as a challenge. The WLC is, as mentioned above, based on the co-operation and partnership between universities, public -, private - and the third sector organizations. Organizations operating in active partner network are creating benefits for themselves with the help of Laurea's long-term developmental partnership. This developmental partnership is the core added value for all involved organizations.

By analyzing the strategies of the social and health care sector in the region and the strategies described by the Ministry of Social Affairs and Health, four research paths were established in the WLC. The research paths are: 1) Well-being for the elderly, 2) Well-being for families, 3) Promotion and maintenance of working capacity and 4) The development and deepening of knowledge related to social responsibility. These paths form an umbrella for more concrete research and development projects. Research and development projects with their targets invite the partner organizations in the WLC to work together as researchers, developers and facilitators in working methods. The results of co-operation as professional knowledge creation are to be seen as new welfare products, working models and working cultures but the WLC also aims to spread and increase the productive capacity of the innovations of partner organizations.

To facilitate professional knowledge creation in the WLC four laboratories have been built. Activity Lab is an evaluation and testing laboratory of capacity where one can evaluate and measure individual abilities, movement, free transition and strength. The information goes to the One-to One Lab which in the WLC is the first full-scale research laboratory of home environments and other premises in Finland, where sustainable solutions for living and working at home and in different environments are produced. The information is also distributed to the Habitat Lab which is a product development laboratory for living at home. As a very convertible home-like environment it offers many possibilities for testing different well-being services and new models of operation in practice. Lab Life as the fourth laboratory is designed for process recognition and modelling with the support of a high-tech process modelling environment. To facilitate connecting people many meeting rooms are made available and the entrance lobby by offering catering services forms the first place for partners to connect. The newest, future oriented unit in the WLC is the Caring TV broadcasting centre, where virtual welfare services are being developed.

Professional research in WLC

Professional research as a concept is still under development and much discussed in Finland. In this section, professional research is shortly described in the way it is reflected in the WLC research and development projects.

The idea of building partnership within the WLC is in research and development based co-operation in which partners are supposed to participate in research and development projects together. In the WLC it is believed, as Nonaka & al (e.g. 2000) has shown that by sharing various kinds of expertise new ideas can be found and new professional knowledge as innovations can be created. In the WLC, professional research means the development of working life within the welfare sector. It can bring new solutions to working life and it also creates new professional knowledge. Professional research in the WLC can be described as action research (e.g. Heikkinen & Syrjälä 2006) applied in a professional context. All the partners including clients are involved in this process. A researcher is

an active participant and innovator, who develops researches and creates new professional knowledge. In research and development projects participants have different roles and responsibilities. Knowledge in, of and for practice are present in professional research (Raij 2007).

Caring TV as an example with reference to the WLC

Caring TV is one of the promising innovations discovered and developed in the WLC. It is shortly described below as an example of evidences in the WLC.

Caring TV is developed by the Laurea University of Applied Sciences, TDC Song and Espoo City. It is a two channel interactive TV through which guidance and support services will be given as far as various programmes to improve and promote the capacities of elderly people living at home. The content of guidance and support services are planned together with clients and with the supervision of experts. In planning these services an elderly person is taken into account as an active partner and as a holistic being (e.g. Rauhala 1995) with his or her own knowledge base, skills and abilities, and values and experiences (e.g. Raij 2003). This we call a client centred method. In the first phase a municipality buys TV channel to selected elderly people. In the second phase it will be offered to the private sector. This will mean that everyone living at home can buy a product which includes both the technology and content production (Piirainen & Raij 2006).

Laurea is responsible for the research and development of the Caring TV – concept and content production, while TDC Song as a private company provides the technology and Espoo City the guidance and support services. Other private companies and municipalities are also included, and experts from the third sector have been invited to the project. The development of Caring TV, as a WLC product, opens new doors and gives us valuable knowledge on how to proceed towards the development of a virtual clinic. It also has taught us how to introduce a new technological innovation to an end user by proceeding from a user centric to a user driven action model. This has been made possible by integrating the expertise offered by a university of applied sciences, a private enterprise and a public sector and by listening to the clients as end users. It means integrating welfare expertise, technology -, business - and research and development expertise in the WLC.

Organizations in the WLC

The following organizations have already chosen the Well Life Center as their partner and working environment:

Laurea University of Applied Sciences , Helsinki University of Technology, ArctiCareTechnologies Oy, Fysiosporttis Oy, Johtamisvoima Oy,

Helsingin Lääkärikeskusyhtymä, TdcSong Oy, Uudenmaan sydänpiiri ry, City of Espoo

The following organizations are also a part of WLC's partnership net, creating professional knowledge with WLC experts:

The School of Economics, University of Jyväskylä/ Faculty of Sport and Health Sciences, Videra Oy, Medixine Oy Hur Oy, City of Vantaa, Turku, Lappeenranta and Laitila town.

Conclusion

The WLC, as a concept, has been developed based on research findings on how new professional knowledge can be created. In the WLC the challenges of a changing world, especially in the welfare sector, have been addressed. Creating new professional knowledge for working life also means new

products, operating models and working cultures. The development of innovations has also provided knowledge on how to bring an innovation to an end user. The processes in the chain from a test laboratory (e.g. Activity Lab, Habitat lab) through a living laboratory (the home environments of our pilot groups) to an end user will be identified by benefiting the research findings of our research and development projects. The WLC is an open and supportive innovation environment based on partnership and co-operation. Its innovation development is based on research as well as on facing the real demands of the welfare sector and by including the voice of the client. It integrates welfare, technology and business knowledge to create innovative service concepts, operational models and working cultures. The WLC enables cost-effective product development for the public, and private as well as the third sectors. The basis for R&D work is a common view of well –being which provides a sustainable direction for businesses and for the development of the entire service system in the welfare sector. The WLC's location is in the heart of technology in Finland, Espoo, Otaniemi.

References

Boekaerts, M. 1996. Personality and the Psychology of Learning. European Journal of Personality 10, 377 – 404.

Heikkinen, E., Syrjälä, L. 2006. Toiminnasta TIETOON. Vantaa, Dark Oy.

V. Krogh, G., Ichijo, K.& Nonaka, I. 2000. Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation. Oxford, University press.

Piirainen, A. & Raij, K. 2006: Coping at Home in Refurbishing the Elderly Care – Evidences and Theoretical Targets. Kansai Fukusi Research Centre, Tohoku Fukusi University. Special issue.

Polytechnics Act (351/2003)

Raij, K. 2000. Toward A Profession. Clinical learning in a hospital environment as described by student nurses. Research Report 166. University of Helsinki, Department of Education.

Raij, K. 2003. Osaamisen tuottaminen ammattikorkeakoulun päämääränä. In Kotila, H. (ed.) Ammattikorkeakoulupedagogiikka (42 – 58). Helsinki, Edita.

Raij, K. 2007. Learning by Developing. Laurea Publications A.58.

Rauhala, L. 1995. Tajunnan itsepuolustus. Yliopistopaino, Helsinki.

Panel Discussions

In the 16th January panel discussions panellists were using interactive Response system to poll audience opinions. Response enabled the audience to anonymously answer the questions the panellists asked in their presentations.

The questions varied by the theme of each panel discussion. Examples of the questions and results.

Question 1. I am		
1	Female	32.8 %
2	Male	62.3 %
3	I don't know	4.9 %
Question 2. In the physical realm we have civil rights and many public safety measures to remove threats, should we have similar rights and protection as we reside and interact in the virtual reality?		
1	Yes	78.4 %
2	No	14.9 %
3	I don't know	6.8 %
Question 3. Should the global internet be governed as a single autonomous (virtual) area perhaps under the jurisdiction of UN but governed by registered active internet users?		
1	Yes	31.6 %
2	No	57.9 %
3	I don't know	10.5 %
Question 4. It is currently impossible to identify the origin of most emails. This makes spam and blackmail common in the Internet. Should this be corrected by regulatory measures?		
1	Yes	75.3 %
2	No	23.3 %
3	I don't know	1.4 %
Question 5. In the future we need to respect the civil rights of more varied cultures in our societies than nowadays?		
1	Yes	92.2 %
2	No	7.8 %
Question 6. There will be a legitimate democratic global governance of strategic resource and other issues in 2107?		
1	Yes	45.5 %
2	No	54.5 %
Question 7. Because the present generation has an unprecented power to influence on the living conditions of the future generations, their rights should be explicitly represented in the societal processes		
1	Yes	65.2 %
2	No	34.8 %
Question 8. Do we have to accept that success in the information society requires good and widespread presentation skills in English language?		
1	Yes	55.0 %
2	No	38.3 %
3	I don't know	6.7 %
Question 9. If social interaction skills in the network are becoming more important than technological skills, does it show in the employment figures?		
1	Yes	49.1 %
2	No	33.3 %
3	I don't know	17.5 %

Question 10. Should citizens be required to bear full burden for information security in the virtual realm even though it would be more efficient to solve many of the problems collectively?		
1	Yes	37.8 %
2	No	55.6 %
3	I don't know	6.7 %
Question 11. Is it realistic to believe that individual citizen can take care of information security as it causes problems even for the IT specialists of major banks and military institutions?		
1	Yes	46.9 %
2	No	49.0 %
3	I don't know	4.1 %
Question 12. Should adolescents be introduced early in their lives to foreign cultures in order to gain easier access to global information society?		
1	Yes	75.0 %
2	No	20.5 %
3	I don't know	4.5 %
Question 13. Todays school mostly teaches to believe in facts and authorities, should adolescents be taught and rewarded for creative and original thinking, and innovative methods?		
1	Yes	91.5 %
2	No	6.4 %
3	I don't know	2.1 %
Question 14. Is it probable that Russia will become more open and transparent through WTO and spreading influence of Internet usage?		
1	Yes	47.1 %
2	No	41.2 %
3	I don't know	11.8 %
Question 15. Should it be clear that the patient owns his/her own medical data and that data should be stored in a standard form so that it is practical for the user to transfer it?		
1	Yes	80.0 %
2	No	5.7%
3	I don't know	14.3 %

Panel on Democracy and Civil Rights in the Information Society

chair: Mr Kalevi OLIN, MP, Parliament of Finland

In the physical realm we have civil rights and many public safety measures to remove threats, should we have similar rights and protection as we reside and interact in the virtual reality?

Should the global internet be governed as a single autonomous (virtual) area perhaps under the jurisdiction of UN but governed by registered active internet users?

It is currently impossible to identify the origin of most e-mails. This makes span man blackmail common in the Internet. Should this be corrected by regulatory measures?

Contribution By The Indonesian Delegation

Mr. Chair, Distinguished Colleagues,

First of all, allow me on behalf of the Indonesian Delegation to extend our appreciation and gratitude to the Finnish Parliament for its hospitality in hosting this General Assembly of the IPAIT. I believe that Finland, being recognized for its high and advance technology in information, is the most appropriate place at present to hold this meeting.

It is indeed an honor for the Indonesian delegation to be able to share our view on the theme of Democracy and Civil Rights in the Information Society.

As a country that endeavors to materialize democracy based on laws, Indonesia attaches great importance in increasing the role of communication and information in the process of the nation's intellectual development and political life, as well as in the achievement of the internationally agreed development goals and objectives, including the Millennium Development Goals. We are of course aware of the challenges we face in information and communication technology. With the unique characteristics, located in Southeast Asia, Indonesia has a total area of 9.8 million square kilometers, of which 81% is sea. It is the world's largest archipelagic country comprising of 5 main islands and 30 small islands and over 17,000 islands, of which a third are inhabited. The country is divided into 33 provinces, 268 regencies, 73 municipalities, 4,044 sub-districts and 69,065 villages. The population of the country projected at 222,6 millions, the fourth most populous country in the world, with uneven distribution. The culture is much diversified with more than 520 ethnic groups and 742 languages, of which 737 are indigenous languages. The country has more rural than urban areas with urban density of 11-25% rural density 0.2%, around 43.022 villages (62.3% from 69,065 villages) without phones.

Based on those data mentioned above, our challenges in realizing information society remain mainly in managing and realizing the connectivity in a very big diversity and a very wide digital divide, in addition to in ensuring appropriate public policy and actions from the government and other stakeholders.

As times change, geographical contexts evolve, and information technology progresses, this civil right has been given providing more opportunities on freedom of opinion, freedom of expression, freedom of the press, the right to information, and, now, the right to communication. Nonetheless,

the right to communication remains a part of all freedom struggles for greater dialogue, pluralism, tolerance, participation and democracy promotion - and against all forms of exclusive authoritarian power.

The Information Society play an increasingly important role in promoting and defending the enjoyment of human rights such as the freedom of expression, the right to information, the right to education, the right to health, the right to food and other rights, seeking universal access by all to information and services. The human rights approach to information society seeks to bring individuals and communities, particularly the disadvantaged, vulnerable and socially excluded, squarely into the Information Society, upholding the principles of non-discrimination, participation and accountability. In the context of democracy and human rights promotion, we are not only promoting those values in our own land but we also encourage other countries in our region to promote democracy and human rights essentially through the implementation of information society. More importantly a human rights approach protects individuals and communities against the transgressions of the right to privacy, restriction and control of rights and freedoms, and against excesses of the Information Society - in particular by promoting protections against hate and racist messages, child pornography and other abuses of human dignity.

Article 19 of the Universal Declaration of Human Rights is of fundamental and specific importance, since it forms an essential condition for human rights-based information and communication societies. Article 19 requires that everyone has the right to freedom of opinion and expression and the right to seek, receive and impart information and ideas, through any media and regardless of frontiers. This implies free circulation of ideas, pluralism of the sources of information and the media, press freedom, and availability of the tools to access information and share knowledge. Freedom of expression on the Internet must be protected by the rule of law rather than through self-regulation and codes of conduct. There must be no prior censorship, arbitrary control of, or constraints on, participants in the communication process or on the content, transmission and dissemination of information. Pluralism of the sources of information and the media must be safeguarded and promoted.

Being aware that Information Society has great impact on the enjoyment of human rights for all, it is thus the role of the officials and civil society to ensure that the impact is positive, and in accordance with human rights principles. In this respect, we would like to emphasize the issue areas in which the relationship between information and communications technology and human rights is particularly important. They include the development, democracy and rule of law, cultural and linguistic diversity, vulnerable groups, trade liberalization and role of private sector.

Mr. Chair, Distinguished delegates,
It is interesting also to witness that democracy in many countries is currently undergoing a situation where the influence of powerful media interests, which disseminate views and comment, can determine political outcomes. The explosion of media networks has given rise to a new form of interactive citizens' participation within the political system. This "network society" which incorporates the most dynamic social segments of the constituency, however, tends to exclude sectors which do not have the resources and technological skills necessary to access this new communication medium.

Use of the right to information by the general public and civil society - Active involvement by non-state actors including the general public, civil society organizations, and the media in using the right to information to gain access to government held information, in raising citizen awareness on right to information legislation, and in generating demand for government held information.

Good government administration and justice in a democratic society implies openness, transparency, accountability, participation and compliance with the rule of law. Respect for these principles is needed to enforce the right to take part in the conduct of public affairs. Public access to information produced or maintained by governments should be enforced, ensuring that the information is timely, complete and accessible in a format and language the public can understand. This further applies to access to documents of corporations relating to their activities affecting the public interest, especially in situations where the government has not made such information public.

Underlying the fact that democracy, civil rights and information society are complementary, the Indonesian parliament has endeavored to provide the infrastructure to precipitate the development of information society that serves as the basis for democracy and civil rights. We are recently working the bills of the freedom of information and information and electronic transaction. In addition, we also support our government in its project to apply IGOS or Indonesia, Go Open Source. In brief, we have already the political support, we are of course aware that the problems are there, such as lack of resources, technological skills, or cultural gap, in which we are much welcome for any constructive cooperation to address these technical problems. Furthermore, it is indeed through this forum that we share our ideas and challenges to seek experience and views exchange from other parliaments which have succeeded in developing information society as the basis for promoting democracy and civil rights.

Mr. Chair, Distinguished delegates,
In particular to parliamentary functions, I would like to conclude my statement my calling parliamentarians to ensure the realization of information society to enhance the effectiveness, efficiency, and transparency of parliamentary activities and to better connect with the constituents, and also to expand inter-parliamentary relationship and cooperation at bilateral and multilateral levels, thus enhancing parliamentary democracy and diplomacy.

I thank you.

Contribution By The Italian Delegation

Thank you, Mr. President, for giving me the floor.

Let me firstly give some brief information about my parliamentary activity. I am a MP from the Chamber of Deputies, member of the Standing Committee for European Affairs and - at the same time member of the Parliamentary Committee for technological Assessment.

So, I have been involved at least for the last 6 years in matters related to science and technology from a particular point of view: 1 am referring to the political point of view and - more specifically - to the parliamentary point of view.

So, I asked to have the floor in this panel because I believe that its title "Democracy and civil rights in the information society" is particularly stimulating for us as politicians and calls for a strongly political approach to the new opportunities offered by the information and communication technologies.

Democracy and civil rights are not matters of science, they are not matter of technology, but they are matter of politics.

I must admit that yesterday I heard many interesting things during the Mr Dator's opening remarks and the scenarios that he so vividly depicted have to be considered very seriously by each of us.

I don't know what Mr Dator thinks about the future destiny of parliamentary assemblies.

I don't know whether the hypothesis of a new electronic democracy without Parliament - is a realistic forecast or not. But I am sure that - not only as a parliamentarian, but mostly as a citizen living in a democratic country - I have to do, and I will do, my best to contrast this forecast and to avoid such a destiny.

In my opinion democracy in modern world (that is the world that was born in Europe at the end of the Middle Age) is not simply "the expression of the people's will" (according to the Greek origin of the word). This concept is just an abstraction and many historians teach us that such direct democracy never existed.

Concretely and historically speaking, modem democracy cannot be detached from the rule of law and from representative institutions. And parliamentary assemblies are the pivotal institutions of democracy.

In modern world - where economy and social life are so complex and articulated - the dream of a democracy where each citizen is able to express his/her own will directly, as a self-sufficient political subject, is an illusion.

Citizens need politics, today more than in the last centuries, exactly because science and technology are - today - more developed than two centuries or two decades ago.

We, citizens, need politics, because politics gives us the appropriate instruments necessary to choose our own future. Without politics that is without modem democracy and modem parliaments - our future would be shaped by scientist - or by dictators - because the isolated citizen, alone with his/her personal computer is a very weak political actor, unable to recognize and to choose what is the best for "the society as a whole".

This citizen can very easily be manipulated or misled. Democracy, with its institutions, is the best way that we have invented to deal with a complex society according to the rule oflaw.

I don't believe that a wise use of ICTs can subvert this model. In a wise and hopeful scenario the ICTs can offer new opportunities to strengthen democracy and its institutions (above all the parliament) and certainly not to put these institutions in a museum together with the portraits of the Father-Founders.

On the contrary, I strongly believe that new information technologies, exactly like biotechnologies or space technologies, call for a stronger political and parliamentarian involvement and commitment.

1. Who decides how to allocate the economic resources? This is particularly true (in developed countries) for space technologies, but it is true also in the case of ICTs.

Particularly in developing countries, who sets priorities in information society when economic resources are limited, public investment are need ed and the needs are compelling? How can we be sure that "the best for the society as a whole" will be chosen without free political parties, free press, regular elections, transparent parliamentary assemblies?

2. A second example. The ICT development calls for a balance between freedom of access to information and protection of privacy. But also between these two fundamental rights and others fundamental rights (like protection of young people, copyright, and so on). How can we carry out this complex task without a legislator?

3. Finally, I would like to point out that the national institutions, the national political bodies risk to be not useless, but - on the contrary - not sufficient when the task consists in dealing with the Internet or with the ubiquitous society depicted by Mr. Dator. The WEB doesn't have national borders. Everybody knows that there is a global debate (in the framework of U.N.) on the issue of the "Internet governance". So, we can easily realize how the new information technologies call for more politics, call for a sort of global governing political institution that carry out the task of balancing national legal systems with an international set of cyber-rights.

I conclude suggesting that this debate should not be conducted only within the executives representatives (the U.N.), but also - and increasingly - within national parliaments and within interparliamentary institutions and forums - like Interparliamentary Union and like IPAIT - because the protection of rights is, in modern democracy one of the major commitment of representatives bodies.

Thank you for your attention.

Panel on Skills required in the Information Society

Chair Ms Hanna-Leena Hemming, MP, Parliament of Finland

Do we have to accept that success in the information society requires good and widespread presentation skills in English language?

In social interaction skills in the network are becoming more important than technological skills, does it show in the employment figures?

Should we emphasize cultural skills as the globalization of the internet requires enhanced understanding between cultures?

Contribution By Lord Methuen, Delegation of The United Kingdom

In the UK, the Department for Communities and Local Government has introduced the Digital Challenge in conjunction with local authorities and industry to develop a truly innovative digital vision for an area, region or city using technology to combat exclusion and depravation. The challenge fund amounted to £10M (over E14M) provided by Central Government and industry. The aim of many of the proposed projects was to develop local broadband Internet capability usually using wireless technology. This was particularly in deprived areas. Another aim was to provide Community Access centres where people can develop their IT skills, with this in particular being aimed at young people aged 12 to 18 who may be socially excluded. 79 challenge proposals were received and after evaluation 10 of these have been taken forward to receive development funding.

The BBC has also been active in fitting out buses with a full range of IT equipment and using these as learning centres around the community, these activities being aimed at both the adult and adolescent elements of the community.

There is one last point I would like to make. In many of our European countries we suffer from very low turnouts in our parliamentary and other elections. In the UK we see the use of the Internet as an essential means of engaging the electorate with Parliament, both for those young voters who are just entering the electoral scene for the first time, and for the disillusioned older voters who think they have little or no impact on the Parliamentary process. We are doing extensive development of the UK Parliamentary website to make it user friendly and to encourage people to learn about what we Parliamentarians actually do, hopefully for their benefit! The latest developments of the website will enable the public to give feed back as to what they wish see on the website.

Panel on the Information Security as a Civic Skill

Chair Mr Jouni Backman, MP, Parliament of Finland

Should citizens be required to bear full burden for information security in the virtual realm even though it would be more efficient to solve many of the problems collectively?

Is it realistic to believe that individual citizen can take care of information security as it causes problems even for the IT specialists of major banks and military institutions?

Contribution By Tonci Tadic, MP, Republic Of Croatia

The information security becomes increasingly important with development of ICT based society. E-Government and especially e-health depends on reliable data bases which in turn can be damaged, destroyed or spoiled or transmitted and misused. The same holds for unauthorized usage and distribution of any personal data base. Not to mention cyber terrorism targeting air-traffic or railway traffic control or military and police information systems.

Our legal system and law enforcement is designed for the purpose of securing of our material property from attacks and treats in the real world. The attacker is real person, the tools used in attack are real and can be traced and the crime can be forensically investigated. But what to do with attacks in cyberspace, where attackers and treats are hard to detect and almost impossible to investigate and punish.

The law enforcement institution needs a proof that attack appeared, needs a trace of the tool used and can be misguided by complexity of internet connections, slave PCs owned by innocent citizens, Internet providers that do not care what goes on etc. It would be necessary to rethink and improve our legal system.

The role of the state in this process is of course to improve legislation, and to call for help experts in ICT.

The security is not only a state issue, but a personal issue, too!

It can be compared to security of buildings or other real estates: the state has a power of law enforcement, but still nobody will risk leaving doors unlocked and windows opened in the case of even the slightest chance of robbing one's house. .

In the same way, ICT security should rely on professionals Le. experts. Nobody will try to defend or secure his real estates or property in non-professional way, without support of security companies. The insurance for lost or damage of data base is still not considered .as real issue, while insurance for property or real estates is normally issued.

Of the same importance is including of introduction on information security in teaching process for ICT. The role of education for ICT should be improving of understanding that improving and spreading ICT systems may lead to their vulnerability and that fighting against cyber crime and ICT security should not be neglected in development of ICT based society.

It must be underlined that attack on ICT tools Le. PCs, networking, data storing devices or data bases should not be treated as attack on tool itself, but on our privacy and on our property. Our privacy is endangered, not our ICT tools. In the same time, struggle against cyber crime should not deteriorate human rights or our citizens.

Contribution By Senator Angel Tâlvar, Secretary of the Committee on Science, Education and Youth of the Senate of Romania

Ensuring the security of the information systems represents a growing priority both for the state institutions and for the private sector, taking into consideration the fact that, at present, their informational flow is mostly electronically administrated.

Starting with 2003, Romania enforced the proper legal framework for the prevention and fight against the informational criminality.

There is no doubt that among the laws discussed and adopted by our Parliament in the last years[1] the most important is the Anticorruption Law, Title III on Preventing and Fighting Cyber-crime[2] which regulates the prevention and fighting of cyber-crime, by specific measures to prevent, discover and sanction the infringements through the computer systems, providing the observance of the human rights and the protection of personal data.

This law establishes very clear patterns of collaboration among the authorities and public institutions with competence in the field[3], the service providers and the non-governmental organizations and other representatives of the civil society, in order to ensure the security of the computer systems and the protection of the personal data. According to the provisions of the law, all the above mentioned actors are in charge to:

- promote policies, practices, measures, procedures and standards for the security of the computer systems.
- carry out common activities and programs for the prevention of cyber-crime.
- organize campaigns of public information (in schools, public institutions, etc.) on cyber-crime and the risks for the users of the computer systems.

Referring also to the increasing involvement of citizens in preventing and fighting against cyber crime it is worth mentioning here that, beginning with 2004, the new portal www.eFrauda.ro became functional as a tool of protection for the suppliers and consumers of information society services. eFrauda offers for victims of Internet fraud -Romanian citizens as well as foreigners-, a convenient and easy-to-use reporting mechanism that alerts authorities of a suspected internet fraud, providing a central repository for the complaints related to Internet fraud and statistical data of current fraud trends.

I will also underline here that the Romanian authorities cooperate directly, in conformity with the Romanian law and with the obligations resulting from the international legal instruments Romania is part of, with the institutions having similar competences from other states, as well as with the international organizations specialized in the domain.

1 Law No 196/2003 on the Prevention and Fighting of Pornography, Law 365/2002 on electronic commerce, Law 455/2001 on electronic signature.

2 This law transpose the international Convention on Cybercrime, Budapest 2001

3 The Ministry of Justice, The Ministry of Domestic Affairs and the Ministry of Communications and Information Technology – in charge to draft and up-date a database on cyber-crime and to carry out special training programmes for the personnel with attributions in preventing and fighting cyber-crime-, The National Institute of Criminology under the subordination of the Ministry of Justice – in charge to carry out studies in order to identify the causes determining and the conditions favouring the cyber-crime.

Last but not least, it should be mentioned the support by Romania of the European Union Programs in this field. For example, through Safer Internet Program 2004-2008, the EU Commission allocated 45 million Euros for the development of projects aiming to promote safe use of internet and online technologies - particularly for children-, to fight against illegal and harmful content, and content unwanted by the end-user. As my colleagues from the EU Member States already know, from May 2006, EUROPE DIRECT provides free telephone and Email service which citizens – teachers, parents and children as well-, can use to find answers to questions they may have in the field of Internet security.

Thank you for your attention.

Panel on Innovation Policy and the Social Capital of Children and Adolescents in the Information Society

Chair Ms Astrid Thors, MP, Parliament of Finland

Should adolescents be introduced early in their lives to foreign cultures in order to gain easier access to global information society?

Today schools mostly teach to believe in facts and authorities. Should adolescents be taught and rewarded for creative and original thinking and innovative methods?

Contribution By Senator Ilie Sirbu, Secretary of the Senate of Romania

We all know that the foundation of the knowledge based economy is not about land or manufacturing plants. It's about knowledge and information; it's about people, about creativity and innovation. That's the reason the investment in human capital represents today the most profitable long term investment for a country.

Fully aware of these challenges and closely following the eEurope+ plan aiming to build an information society for all and the most dynamic and competitive knowledge-based economy in the world until 2010, Romania increased in 2007 the investment in education to 5.2 % of the GDP.

Referring to the level of access to ICT in the education system it is important to emphasise that, although the ICT disciplines are not compulsory at primary school level, there are many such institutions where IT Laboratories are in place and pupils are offered access to computers as well as basic IT knowledge.

I would like to underline here that the education sector managed to adapt itself to the requirements of the technology era, through a fast process, with excellent results. In November 2006, "The Oscar in Project Management"4 was granted to the Romanian IT based Educational System(SEI), the national IT Program for the pre-university educational system-a project initiated by the Romanian Ministry of Education and Research and implemented by SIVECO Romania in partnership with IBM and HP.

This award certifies the quality of the entire management process and the great results obtained through this program implementation, that very briefly, represented the delivery of 4780 IT laboratory in schools and high schools, of 1650 interactive lessons and the training of 60.000 romanian teachers.

We are also proud that, in a very short time, we advanced in terms of virtual library and e-learning solutions and I will mention here that AeL eLearning platform –representing 100% Romanian multimedia educational content-, won the World Summit Award in 2005.

Among the most recent measures adopted by the state institutions in the educational field related to children and adolescents I will mention here:

4 "The Excellence Award in Project Management" is an important competition organized annually by **the International Project Management Association (**IPMA) and **the Romanian Project Management Association (**APMR) that awards Romanian teams with excellent results in Project Management.

- the launching of the National Pupils Council website as a reliable source of information facilitating, together with the already very popular portal.edu.ro, the contact of pupils, teachers, parents and providing accurate and up-to-date information in the educational domain.

- the implementation of the Money for High School -a national social security Program granting monthly financial aid to pupils in need, enrolled in high schools or vocational schools.

- the adoption of the Law concerning the education of the exceptionally gifted pupils, offering a more stimulating educational environment and attractive employment opportunities after graduation, as a first step to prevent and stop the brain drain.

- the implementation of the 200Euro Program - a social aid offered to youngsters in order to buy their first computer and assure the advantageous access to Internet;

- the implementation of the "e-country school" Project - 56 euro were allocated for the training of 25.000 teachers and for the acquisition of ITC equipments for 1500 schools, until 2010.

I will conclude by saying that, for sure, Romania will have to face many challenges, taking also into account the recent integration into the European Union, especially in order to narrow down, economic, social and cultural discrepancies but, based on the achievements attained over the last years, we believe in our power to overcome them, because as it is said " if during your life time you find a road with any obstacles, you will know for sure that it leads nowhere".

Panel on IT and Russian Scenarios

Co-Chairs Mr Esko-Juhani Tennilä, MP, Parliament of Finland and
Ms Marjo Matikainen-Kallström, MP, Parliament of Finland

Is it probable that Russia will become more open and transparent through WTO and spreading influence of Internet usage?

The Finnish Parliament/Committee for the Future published in January 2007 a future oriented study on Russia called Russia 2017: three scenarios (Eds. Osmo Kuusi, Paula Tiihonen, Hanna Smith).

Russia 2017: three scenarios

Contents

II SOME CONCLUSIONS AND PROPOSALS FOR FINLAND

1. Finnish expertise in relation to Russia
2. Cooperation in order to diversify the Russian export sector
3. Ensuring the involvement of SMEs
4. Participation in Russian health, education, agriculture and housing programmes
5. Adjacent Areas cooperation and the Northern Dimension
6. An extensive Russia policy programme

III VIEWS ON RUSSIA POLICY AND RUSSIA

1. General doctrines and operational models in policy towards Russia (Paula Tiihonen)

100 years of shared history and 100 years as neighbours are the foundation for the next 100 years

Formulating policy on Russia – are there lessons to be learned?

2. Russia under the rule of law (Hanna Smith)
    - Democracy and the rule of law
    - Russians and the law
    - The Council of Europe and The Court of Human Rights
    - Freedom of speech in the media – the right to information
    - Corruption
    - 2008 - a turning point?
    - Summary
3. Russian foreign policy (Hanna Smith)
    - What does Russia look for and want from the EU in the future?
    - Russia and the European Union
    - Russia and the United States
    - Russia and the other CIS countries
    - Russia, China and India
    - Summary
4. Anti-Russianism and the shackles of history (Antero Eerola)
    - Russophobia as white Finland's ideology
    - The AKS and the brothers of hate
    - St. Petersburg for a better life
    - Russia through political eyeglasses
    - Will Russia be exalted to the ranks of nations?
5. The future of Russia: Certainties and uncertainties (Seppo Remes)
    - General assessment of scenarios
    - Critical comments on the scenarios
    - Final comment

For further information about the study, please contact by e-mail: tuv@parliament.fi

Panel on IT and Health Care System

Co-Chairs Mr Rauno Kettunen, MP, Parliament of Finalnd and
Ms Anne Huotari, MP, Parliament of Finland

As digitalization clearly makes it cheap to perform various analysis even at home, should it be supported that more and more diagnostic work would be automated and restrictions for the medical profession lowered?

Should it be clear that the patient owns his/her own medical date and that data should be stored in a standard form so that it is practical for the user to transfer it?

Contribution By Trees Merckx-Van Goey, MP, Belgium Flanders

In her speech yesterday the deputy speaker spend a lot of attention to ICT and its applications to health care; we learned that in the Finish parliamentary a lot of time did go to health care. Two documents of the Committee of the Future on the future of health care and the proposal of 'a caring, encouraging and creative Finland' are most valuable to read and to implement in many of our countries.

I felt challenged to think and bring you a story about how we give health care a place in our parliamentary work, especially how we try to prepare the future.

In Flanders we did a technology forecasting and foresighting exercise, on a smaller scale and focused on the desired future of the elderly and ICT. The study dealt with the interaction between two important trends in our society: the greying of society and the technology - induced transformation of everyday life. It aimed at formulating policy recommendations based on a dialogue with senior citizens.

How does the trend or an emerging technological information society interact with the demographic trend in western societies or a growing population of the elderly.

A three phased methodology was developed, relying on methods of participatory technology assessment and technology foresighting.

- First: a literature study, expert discussions and focus groups with future elderly provided the necessary information for the development of scenarios about the future.

- Second: the scenarios were transformed into a theatre play, which was performed for elderly au-

diences; group discussions with senior participants led to the formulation of the desired future with regard to the elderly and ICT;

- Third : in a backcasting exercise with experts and stakeholders policy recommendations were formulated.

What did we expect of this exercise?

A contribution to public and political opinion formation: we need knowledge regarding the societal aspects of ICT. Three equally important pillars form the basis of the exercise: science, interaction and communication were integrated in the process:

- Science provides knowledge on the developments, possibilities and consequences of technology;
- interaction and participation ensure that citizens, experts and stakeholders are included in the process of assessing and debating socially sensitive issues in science and technology; this gives a broader support and incorporates knowledge that might be overlooked;
- communication not only at the end of the project but also during the earlier phases . it is a tool to keep track of outside reality.

What did we get?

We have now an overview of the desired future, per life area (work, education, housing, etc.) I want to focus on the healthcare.

The outcome says that we want.

- technology as a means to improve the quality of life(faster diagnosis, better treatment , monitoring and alarming from a distance, independent living, even when one is sick,) as a means to carry out euthanasia, to control the food chain
- availability of information for medical personnel to optimise the health care system (reduced waiting times, no double investigations)

The overview of unwanted future; we do not want:

- intrusion of privacy (abuse and commercialisation of medical information.
- the disappearance of human contact in the health sector: we want to speak with real life doctors; it is an expression of how we value the right of self-determination.
- needless prolongation of human life and suffering.

We learned that people do not want to be focused into a purely technological paradigm in which the choice between technology and

Some final remarks:

- it is difficult to think about the distant future, for lay people but also for experts. But it is very

clear that people are interested in technology's impact on society. The high communicational value of the chosen method (the theatre play) proves its merits.

- the usefulness will not surface until the framework is reflected in actual policy plans
- what has been done since the recommendations?

  - a manageable tool for socio-cultural training courses aimed at elderly; a DVD recording of the theatre play , guidelines and a script for moderating discussions about ICT

  - results and policy recommendations given to MP

  - all institutions are made aware of the topic and asked to continue research and further description of alternative futures.

In the mean time the Flemish parliament asked for a new study on the relation of ICT and disadvantaged people, by using the same or slightly adapted participative method. It is essential that parliamentarians do everything that is in their means to implicate the whole population, next to scientist and stakeholders before and while taking decisions for the future.

In the second part of my short presentation I will overview some trends in health care that we are facing.

Trend 1: life expectancy is increasing

Trend 2: cost explosion (prevalence and cost of uncured diseases as cancer, cardiovascular diseases, diabetes, depression) advances in diagnosis and treatment in a hospital: tremendous decrease of in-hospital mortality, but because of longer life expectancy: increase of chronically ill patients, treatment rather than curing

Trend 3: rising expectations: health and fitness ranks among top 10 % of most personal values, concern over personal health is 3rd most important cause of stress.

We see a shift from treatment to enhancement, from disease management to health management, and from patient compliance to health experience.

We see the empowered patient become an autonomous citizen, who is proactive for his own health and selfcare, and seeking services for prevention and disease management. The awareness of life styles is constantly growing.

We are confronted with wireless miniaturised autonomous sensors on and around the body. They will increase health, comfort and safety of the people. But also false expectations grow and should be avoided.

The challenges for the health care system are important:

how to shift towards prevention, how to favour multi casual thinking of human health, how to introduce the changing role of health care professionals, how to assess and evaluate the care and cure, how far does the respect of privacy need to be protected, how do we deal with citizens' s involve-

ment and the ownership of electronic healthcare records…

But there are also political challenges:

how do the different levels of decision-making in healthcare tackle the issues , how will the synchronisation of European (and in a later future of world-)healthcare systems be done, how can we introduce consequently The precautionary principle in health care?

Then the socio-economic challenges:

how can we evaluate from the short-term cost to long term cost/benefit approach, how do we get an approval for more prevention that is cheaper than treatment, how to promote behaviour changes is a huge challenge?

At the same time we are challenged by trends in the information society technologies.

The shift to the technologies for ambient intelligence is being introduced; technologies convert and we no longer shall be confronted with just ICT, but also with nano-electronics, nanotechnology, biotechnology, process-technologies for The next generation chips, convergence of micro electronics and biology, biochemistry, physics and medical sciences The technologies for ambient intelligence as there is The wireless communication, multimedia, microsystems, solarcells will grow in importance.

Trust and security, knowledge management need to be worked at. Parliamentarians can offer a free zone for dialogue and discussion. In the hope this will bring more quality of life, social cohesion for all, by the means of the in formation society technologies.

A lot of challenges, for day to day, but even more for the approaching future for all.

For more information: 'Towards the desired future of the elderly and ICT. Published online 25 May 2006. Springer-Verlag

What is IPAIT?

Briefly, International Parliamentarians' Association of Information Technology, IPAIT, is a future-oriented and innovative global parliamentary network. It is formed by parliamentarians, who think that technology, notably information technology, is one of the important success factors that determine the course of the future. Therefore it is important to parliamentarians not only to follow technological development broadly but also to involve - and even try to make the better future - by using new technology as a powerful tool.

Becoming a member of the IPAIT is very easy and any parliament or parliamentarian can become a member to this parliamentary network. This can be done by attending the next IPAIT general assembly (next in Bulgaria) and inform the organizers (the Bulgarian Parliament) that you/your Parliament want to become a member. The membership then will be handled and confirmed in IPAIT General Assembly.

More information on the working methods and aims of the IPAIT can be obtained from rules and latest declaration and joint communiqué here below.

IPAIT V General Assembly

The fifth General Assembly of the International Parliamentarians' Association for Information Technology (IPAIT V) was held in Helsinki on 15–17 January 2007 with the theme 'Human competency development in the Information Society'. Altogether 115 representatives from 36 parliaments attended the conference. In addition to the General Assembly sittings the conference activities included lectures by guest speakers, panel discussions on different aspects of ICT development as well as company and school visits. The IPAIT V General Assembly adopted the Helsinki Declaration expressing the shared consensus of the participants of the IPAIT V on the importance of human competency development for information society development and sets out activities to be taken by the member countries to facilitate equal development of these competencies. The General Assembly also adopted a Joint Communiqué detailing to the running and deliberations of the conference.

Charter of the International Parliamentarians' Association for Information Technology (IPAIT)

Chapter 1 – General Provisions

Article 1 – (Name)

This organization shall be named the International Parliamentarians' Association for Information Technology (hereby IPAIT).

Article 2 – (Purpose)

IPAIT's main purpose shall be to support the development of information technology at the parliamentarian level as well as to achieve a balanced development of information technology and sharing of information among all countries around the world by promoting international exchange and co-operation among parliamentarians.

Chapter 2 – Membership

Article 3 – (Composition)

Membership of IPAIT shall be composed of parliamentarians from their respective National Parliaments. Each Parliament shall designate an official national chapter to bring more participation and continuity to the activities of IPAIT.

Article 4 – (Membership)

1. Countries with representation in the 2002 Inaugural General Assembly are the founder members of IPAIT.

2. Any new applicant for membership shall submit the candidacy to the Secretariat of the country hosting the next General Assembly, 60 days before the next General Assembly and the Secretariat shall notify about such candidacy to all Members of IPAIT.

3. Any new member shall be admitted to IPAIT upon the approval of the General Assembly.

Article 5 – (Observer)

1. IT-related international organizations such as UN system agencies or government agencies of member countries approved by the respective members may participate in the meetings of IPAIT as observers with the permission of IPAIT.

2. With the permission of IPAIT, the observer may speak at the meetings of IPAIT.

Chapter 3 – General Assembly

Article 6 – (Composition of the General Assembly)

1. The General Assembly shall be composed of delegations from Member Countries.

2. Each Member Country may dispatch up to ten parliamentarians as delegates to the General Assembly.

Article 7 – (General Assembly)

The General Assembly shall be held once a year. The place and date shall be decided at the preceding General Assembly with the rotation between continents taken into consideration.

Article 8 – (Decisions of the General Assembly)

1. Decisions of the General Assembly shall be made by consensus. However, if any National Delegation objects, the decision shall be taken by a majority vote of the members present.

2. Each Member Country is entitled to a single vote.

Article 9 – (Rules and Regulations)

The General Assembly will adopt rules and regulations for IPAIT and standing orders for its proceedings.

Chapter 4 – Office Holders and Committees

Article 10 – (Presidency)

1. The President of IPAIT shall be elected by the General Assembly with the recommendation of the hosting country.

2. The President shall represent IPAIT and preside over the General Assembly.

3. In the event of the President's resignation, death, or other reasons disabling the President from carrying out his/her duties, a parliamentarian appointed by the parliament to which the President pertains becomes the temporary President. In this case, the temporary President shall notify such to all Member Countries.

Article 11 – (Vice-Presidency)

The Vice-President shall be elected by the General Assembly with the recommendation of the Member Country hosting the next General Assembly.

Article 12 – (Terms of Presidency and Vice-Presidency)

The terms of the Presidency and the Vice-Presidency shall be from the day of his/her election to the election of the President and the Vice-President, respectively.

Article 13 – (Committees)

1. The General Assembly shall establish a Steering Committee and such other committees deemed necessary

2. The term of the Steering Committee shall be from the day of the election to the election of a new committee at the next General Assembly.

Chapter 5 – Secretariat

Article 14 – (Central Secretariat)

1. The Secretariat which the President represents shall be the Central Secretariat.

2. The Central Secretariat shall carry out duties including the preparation of reports for the implementation of decisions such as adopted resolutions, storage of such documents, drawing up the proceedings of the General Assembly, writing out documents and operating as the center of information and communication.

Article 15 – (Secretariat)

All member countries shall establish or designate a Secretariat for the facilitation of communication and cooperation among the Member Countries.

Chapter 6 – Expenses

Article 16 – (Expenses)

1. The expenses for hosting the General Assembly shall be borne by the host parliament.

2. Expenses of participation, such as airfares and accommodation fees, shall be borne by the participating parliaments.

Chapter 7 – Official Language

Article 17 – (Official Languages)

The official languages of IPAIT shall be English and the official language of the host country, and all documents shall be drawn up in the official languages. The official languages where deemed appropriate shall be used in the creation of web pages on the official website of each National Parliament. However in the event where the interpretation and meaning are different, the English interpretation and meaning shall be taken into consideration.

Chapter 8 – Amendments

Article 18 – Amendments

The Charter may be amended only by the majority of the vote cast and two thirds of the members participating in the General Assembly must be present at the time of voting.

IPAIT V – Human Competency development in the Information Society

Parliament of Finland, 15-17 January 2007

The Fifth General Assembly of the International Parliamentarians' Association for Information Technology

HELSINKI DECLARATION

We, members of the International Parliamentarians' Association for Information Technology (IPAIT) have gathered here in Helsinki, Finland for the Fifth General Assembly of our Association in order to learn from each other and to discuss different opportunities and challenges set to our societies by ICT development. We have addressed the theme of the Fifth Assembly, "Human Competency Development in the Information Society" from various perspectives, and this fruitful change of ideas will benefit us in our task as parliamentarians. This social network of parliamentarians interested in ICT legislation and governance will serve us well in the future.

- Considering that the main purpose of the Association is to support the development of information technology at the parliamentarian level as well as to achieve a balanced development of information technology and sharing of information among all countries around the world by promoting international exchange and cooperation among parliamentarians;

- Understanding the critical role of basic education for development and prosperity of nations as well as wellbeing and equality of people;

- Considering that human resource is the key asset in information technology;

- Expressing our ambition to provide education for societal development to all our citizens over time;

- Considering that disabled people can greatly benefit from the learning possibilities offered by the development of ICT learning technologies;

- Recognizing the new competency requirements information society development sets to all people, including not only technology but media literacy, information security and new social capital as well;

- Recognizing the importance of a basic ICT infrastructure for successful information society competency development;

- Noting that majority of humanity is being left out from information society development either by lack of infrastructure, insufficient competencies or unwillingness to use new technologies;

- Realising the opportunities and challenges that new ICT based learning technologies set to our education systems;

- Taking into account the importance of international co-operation in the promotion of the development of information technology;

- Recognizing that children increasingly use the Internet and thus are subjects to the negative information available there;

Noting a majority we agree to:

1. Express our support for the declaration of principles and the action plans adopted in the United Nations World Summit on the information society held in Geneva 2003 and in Tunis 2005.

2. Continue implementing the recommendations and resolutions of the previous four IPAIT General Assemblies held in Seoul in 2002, Bangkok in 2004, Brasilia in 2005 and Rabat in 2006.

3. Express our determination to provide all our citizens, especially the youth, with basic competencies needed in order to use information and communication technologies regardless of their gender, ethnicity or social status.

4. Encourage girls and women to acquire information and communication technology skills.

5. Promote the development of new ICT learning technologies that take into consideration the needs of disabled people and enable them to benefit from these.

6. Request the development of affordable, easy to use information systems that do not require complex infrastructure.

7. Stress the importance of free access to information and unlimited communication for learning and creation of new knowledge - potential that, if fully utilized, can help to bring about social and political change.

8. Underline the importance of scientific and proprietary information for developing nations.

9. Encourage the development of easily portable, language independent and affordable or non-proprietary learning systems.

10. Facilitate the proliferation of successful learning systems and practices.

11. Affirm our determination to improve digital security and combat Internet crime without sacrificing basic human rights like freedom of speech and privacy in the process.

12. Underline that developing nations must be supported in their efforts to increase and promote their ICT capacity, and that for this end they require not only economic and technological support but informational support as well.

13. Promote education campaigns for parents in order to be able to supervise the use of the Internet by their children, and thus protect them from possible harmful information available on the Internet

14. Encourage governments and parliaments to keep up with ever updating ICT systems;

15. Perceive the importance of ICT's contribution to encouraging and enhancing life-long education.

16. Encourage the increase of bilateral and multilateral cooperation among the IPAIT member countries aimed at decreasing the digital gap between them.

Done in Helsinki with corresponding versions in Finnish and Swedish on January 17, 2007.

The Fifth General Assembly of the International Parliamentarians' Association for Information Technology

Helsinki, 15–17 January 2007

Joint Communiqué

The parliamentary members of the International Parliamentarians' Association for Information Technology (IPAIT) who gathered for the Fifth General Assembly held in Helsinki, Finland in 15-17 of January 2007 issue the following communication:

1. The Fifth General Assembly of IPAIT was attended by 115 delegates from 36 countries in addition to diplomatic corps and other national and international authorities. 24 IPAIT member countries were present with observer delegations from 12 nations. During the General Assembly, the participating parliamentarians discussed the theme of the Assembly: "Human Competency Development in the Information Society".

2. The themes of the former General Assemblies of IPAIT have been: "The Digital Divide" (IPAIT I, Seoul, Republic of Korea, July 2002) "Enhancement of Digital Opportunities through e-Parliament and ICT Development (IPAIT II, Bangkok, Thailand, May 2004), "IT for Social Integration" (IPAIT III, City of Brasilia, Brazil, July 2005) and "IT for Everybody" (IPAIT IV, Rabat, Morocco, June 2006).

3. The General Assembly was opened on January 15th 2007 at the Finnish Parliament by the Vice Speaker of the Parliament, Mrs Sirkka-Liisa Anttila and complemented by opening remarks by the delegation of Morocco, the host country of IPAIT IV. The opening ceremony was concluded by a keynote speech by Professor Jim Dator: "Governing the Futures: Dream or Survival Societies?" In his presentation, Professor Dator noted how the currently prevalent system of governance was based on 18th century technology and best knowledge but is becoming more and more outdated in our networked global environment.

4. MP Jyrki Kasvi from Finland was elected as the President of the General Assembly and MP Mincho Spasov from Bulgaria was elected the Vice President.

5. During the plenary sessions, nine country reports highlighting current information society development from the perspective of the assembly were presented by Dr Hyo Seuk Kim from the Republic of Korea, Mr Tonci Tadic from Croatia, Mr Leo Brincat from Malta, Mr A.T.M. Ataur Rahman from Bangladesh, Dr. Nadia Hegazi from Egypt, Hon. Sammy Weya from Kenya, Mr Fernando Heitor from Angola, Mr Lutero Simango from Mozambique and Mr Ronald Kiandee from Malaysia.

6. Six panel sessions were organised, focusing both on the theme of the Assembly and the current information society issues of the Committee for the Future of the Parliament of Finland. The titles of the panels were: Democracy and civil rights in the information society, Skills required in the information society, Information security as a civic skill: Information security school and day, Innovation policy and the social capital of children and adolescents in the information society, IT and Russian scenarios and IT and Health care system. The panels were conducted by electronic votes by the audience on key questions. The delegations from the Republic of Korea,

Lithuania, Italy, Indonesia, Finland, Angola, Morocco, Israel, Belgium, Kenya, Romania, United Kingdom, Germany, Poland, Sweden and Belgium-Flanders took part to the panel discussions.

7. Several lectures were included in the program. Ms Katrina Harjuhahto-Madetoja, Programme Director of the Governmental Information Society Programme presented the New National Knowledge Society Strategy of Finland: Good Life in Information Society. Professor Pekka Himanen defined the key elements of a Creative Society, neworks of creative people with a passion for what they are doing. Professor Jarkko Hautamäki described the Finnish School System and the reasons why Finland is doing so well in international PISA comparisons, including the fact that the best school students in Finland are not better than in other counties but the number of poorly doing students is much lower in Finland than elsewhere. Mr Risto Linturi asked, Can Global Information Society Sustain Egalitarian Democracy? and concluded that in order to develop and grow, society should not focus too much on stability and security.

8. The new information systems of the Parliament were introduced to the participants, particularly the new Session Hall system to be installed in summer 2007 and the Legislators Game used to teach Finnish children the Finnish legislative process.

9. In the course of the General Assembly, the participants visited two companies, Microsoft Finland and F-Secure. Microsoft Finland is the local subsidiary of the leading international software company. F-Secure is the fastest growing virus protection and Internet security company in the world, located in Finland.

10. The participants also had a chance to visit two Finnish learning establishments, Well Life Center of the Laurea University of Applied Sciences, and Helia University of Business and Applied Sciences.

11. The General Assembly reviewed the status of information-technology-oriented-cooperation among the parliaments of the member countries and concluded that further efforts are needed to facilitate networking and communication, particularly between General Assembly meetings.

12. The Assembly approved the Helsinki Declaration, which expresses the shared consensus concerning the importance of human competency development for information society development and sets out activities to be taken by the member countries to facilitate equal development of these competencies.

13. The delegates discussed on the continuity of IPAIT participation on member countries. In order to enhance continuity it was suggested that a copy of the invitation for future General Assembly meetings were to those MP's who had participated the previous General Assembly in addition to the speakers of the Parliaments of member countries.

14. The General Assembly observed a letter from the Head of the office of the United Nations Department of Economic and Social Affairs (UNDESA), acting as the Executive Coordinator a.i. of United Nations Global Centre for ICT in Parliament. Global Center for ICT in Parliament suggests cooperation of various forms with IPAIT, including dedicated space on the Global Centre's website for IPAIT, an engagement to provide a parliamentary perspective to the Global Alliance's work and an invitation to participate in international events organized in the framework of the Global Centre. The General Assembly gave a mandate to the President and Vice-President of IPAIT to take the necessary steps in order to start the co-operation with the Global Center for ICT in Parliament.

15. The General Assembly also took note of the invitation presented by the Italian delegation to an International Conference on the Policymaking Role of Parliaments in the Development of the Information Society in Rome, Italy on 3-4 March 2007.

16. The participants to the IPAIT V General Assembly expressed their appreciation and congratulated Finland for the organisation of the Assembly.

17. Participating parliamentarians congratulated Bulgaria, the seat country for the Sixth IPAIT General Assembly in 2008 and thanked each other for the fruitful and interesting General Assembly in Helsinki.

Committee for the Future
Parliament of Finland

Tasks

The Committee for the Future
- prepares parliamentary documents entrusted to it, such as Parliament's response to the Government's Report on the Future
- issues statements to other committees on matters related to the future when asked to do so
- discusses issues pertaining to future development factors and development models
- analyses research regarding the future, including methodology
- serves as the parliamentary body responsible for assessing technological development and its consequences for society

Parliaments have also visionary power

We know that Parliament is not a place to rebel or start a revolution. We are even used to think that Parliaments all over the world are those old-fashioned institutes which respect history and traditions. Parliaments protect Status Quo. Do Parliaments have anything to do with modernization process? YES. Politics is all about shaping and making our common Future which cannot be understood without a certain amount of modernization and rethinking. In all politics the future must always be taken with care into consideration. But to be able to do this, you need forums for futures-oriented thinking and above all forums to make political, financial and juridical decisions on the future. These forums must be situated as close to centres of power as possible.

In Finland the Eduskunta, - which as the national parliament is certainly one of the centres of power - decided in 1993 to establish a special committee to deliberate problems of our shared future. The powers of the Eduskunta are as in any other Parliament. They can be divided traditionally into legislative and budgetary but as our example will show nowadays also into visionary. The Committee for the Future was created to strengthen the visionary aspect - the modern aspect - of power if you want to express it with these words.

Future-oriented committee was tentatively named the Committee of the Future, but it got off to a very good start in that at its very first meeting the 17 members (all parliamentarians, representing the full spectrum of political parties) decided to change the name to the Committee for the Future. The change of preposition demonstrated that they wanted their committee to be active rather than passive; to be for the future not against it, to take an innovative attitude to science and technology and not resist it merely because it is new, and so on. Parliament wanted to be a part of modernization process at the beginning of the 1990', in the situation where Finland was in deep depression. The committee wanted to be a part of Finland's victory over those hard times.

It is an adage of political life at any level that the first step to power is to take the initiative and put yourself in a position where you can set the agenda. In the Eduskunta, the Committee for the Future has taken this adage seriously from the very beginning. The only rule in setting an agenda has been that it has to be something that is new and important to people. Of course the idea is to tackle only big issues, but we have to be humble and admit that we see small things better. Some of them can turn out to be big matters.

Paula Tiihonen, Doctor of Administrative Sciences
Committee Counsel to the Committee for the Future, Parliament of Finland