Dear state secretary, Dr. Kristina Böhlke, Dear Vice President, Dr. Thomas Schünemann, Dear colleagues from the IFIP, EMISA/MOBIS and ICCL Conferences, Ladies and Gentlemen,

It was while I was a student that my father – who was working in the energy sector and saving energy wherever he could -- gave me a pile of books to read. And while I went through them -- books such as "The limits of growth" from the Club of Rome, or "A plundered planet" "Ein Planet wird geplündert" - I felt like I was undergoing a second conversion. My first one was raised by facing the fact that my own life will come to an end and the consequences of this, the second now by facing the fact that our earth has its limitations. And still today – for instance whenever I see a video from the Hubble space telescope – I feel myself in awe of the universe we are living in and I tremble. –

But coming back and down to earth. We are all gathered here today from many nations at a point in time round about 50 years after information systems found their way into enterprises. And now, IT is at a remarkable stage, it has certainly outgrown itself and it permeates nearly everything.

IT has become a reality on this planet, a new dimension offering countless digital worlds and almost suggesting infinity, an infrastructure upon which our traditional ones are largely dependent, a means of communication and information, changing profoundly business and our own individual lives, equipping us with almost unthinkable opportunities.

We in this room have all contributed to parts of this development. And now – IT systems and tools seem to be striking back. More and more employees are unable to keep up with an overwhelming and over-stimulating communication overload, how about whole organizations, just going on with Enterprise 2.0? And what about data privacy, dealing with huge amounts of stored data everywhere, and security issues are enormous challenges. So, do we need a halt?

Each of us knows there is no halt.

Yet, being able to be more influential, raising more clearly our voice and integrating aspects of sustainability more widely in our IT branch and information systems field could make a change.

I should like to put a citation in the center of consideration, which I cite in nearly each of my

courses.

It stems from Checkland's well known book "Systems Thinking Systems Practice", he cites Merton who cites Ellul. "Ellul means that the ever-expanding and irreversible rule of technique is extended to all domains of life. It is a civilization committed to *the quest for improved means to carelessly examined ends. ... technique turns means into ends* [emphasized by Checkland]" (cited in P. Checkland: Systems Thinking Systems Practice, 1999, p. 145).

But, carefully examined ends are not at all easily determined, requiring – as many of us fought for in the past – more knowledge about the context, better bridging analysis and design, aligning different perspectives and interests and so on. And often, the development is far from easy to predict. Carefully examined ends need time, resources and mature approaches and - above all – mature people. All will come neither overnight, nor without effort and conviction.

And here we are: privileged, entrusted and obliged as academia – to make a halt – to reflect! During this conference, this evening and in our day-to-day practice.

So, my wish is that we as a research community may build up a social network regarding sustainability and governance in information systems, to share ideas around the globe, based on a research center in Hamburg hopefully shortly to be founded after this conference, as others may be built elsewhere.

And my wish is for three topics to be addressed:

## The first – the previous speakers have mentioned it already – is education.

Not only that we have to bring a broader perspective of IT into the schools – that means not only programming or computer science but also information systems and IT-governance, sustainability. I myself gave lectures in an academy for high school students and they were very well able even to understand the need for and aspects of EAM. Similarly, we developed in Greenfoot a prototype of a baggage handling system and used it for simulation in schools, discussing questions of efficiency and safety. The pupils were highly enthusiastic.

What we need first: Good didactical material for schools that transport the complexity of socio-technical systems, for instances by using case studies or prototypes. There is so much endeavor existing, inspiring projects between companies and schools with excellent results, but unfortunately these are very often, not sustainable.

So, secondly what we need: a social network to share this material around the globe and moderators or a center to maintain it, by providing standards and reports on how the

material was used. And of course on each site: we need a bit of investment in personnel and reaching out for cooperation between academia, teachers and industry. We could even share material with countries that have so many more young people to be educated than in our "developed" countries.

But one more aspect on this topic, which I can only touch upon briefly: we are in a very specific situation. Every young generation has always had to find its way. But this time it is specific. The digital natives, I think, are sometimes left alone. They know more, are faster in adoption of the new technology, they are autodidacts. Many of the social network applications were built by the young generation. We see enormous achievements. And yet, take this as an example: In the UK I spoke to a Phd student. He was working on social media. He was bright, brilliant in interdisciplinary work, but he had – due to his limited life experience – a quite naïve view of sharing. Digital places mirror the state of this earth – good and evil. And we have to make the effort to reach out for the digital natives in the places where they are in order to educate them. That is our duty.

All this is a good reason for our center for "Governance and sustainability in IS" to be founded.

## The second topic is governance.

And I mean IT-governance in enterprises, networks, economic branches, systems of systems, we need new structures and processes in addition to the existing ones.

We need mixed teams, new organizational units for IT as a business driver with analytic and strategic tasks as well as service providers for the business units. Here, industry and academia have great topics for joint projects under the umbrella of our future center for governance and sustainability in IS to be founded. And the mixed teams need to be equipped with methods, tools and visualization techniques for extracting/providing an appropriate level of abstraction of the grown complexity everywhere for improving the quality of discourse in finding solutions to wicked problems.

And, in parallel, I see new governance demands in academia itself. Interdisciplinary research is necessary more than ever before. On this path, we continue to require – besides improved incentives and career paths – - theoretical work. I have appreciated much work on overcoming dichotomies in paradigms, like the discussed Giddens, ANT, or – for those who might know him – -Andrew Pickering "The mangle of practice" etc. These theoretical underpinnings provide us with the intellectual sharpness and insight which all of us need in this kind of research. Again, a center in Hamburg and a network around the world could sharpen this dimension.

## The third topic is security.

In a world, where our economy – and that means our basis for the survival of our quite crowded planet (with 7 billion inhabitants)– is so dependent on IT, here it is also time for a halt.

Sustainability means more than ever putting focus on secure information systems and infrastructures. And from our research field we know that security requires far more than technical solutions. Joint efforts have to be made on organizational, national or international level. Just one of so many examples: Secure wireless updates of software in airplanes around the world need to take into account a rich perspective on – of course technology – but also the processes, the people, the contexts involved. We in informations systems have to strive that our voice regarding this rich perspective on security will be heard by politicians towards politics. More so than ever. Possibly based on a research center.

This conference, this place gives us today the possibility of a brief halt.

But let me thank those who have enabled this conference and this evening: our host, the Behörde für Wissenschaft und Forschung, (Department of Science and Research), Staatsrätin Dr. Böhlke for opening the door to us, my dear colleagues in Hamburg, Markus Nüttgens, Nadine Blinn, Tilo Böhmann and Paul Drews and many others who have invested so much effort in this event. Our Department Head Horst Oberquelle for his nearly endless engagement for us all.

Thanks for our so fruitful links to the chamber of commerce in Hamburg with vice president Dr. Schünemann and to our curatorship of our Master course IT-Management and -Consulting represented by the coinitiator Jürgen Sponnagel. A vivid network bridging academia and industry has been founded, it demonstrates that innovative and much-needed concepts can be realized within a reasonable time frame.

IT has certainly outgrown itself. Our short halt means: the time is ripe and needs sometimes bold decisions and new paths to take. It calls for outstanding efforts in education, governance and security. Governance and sustainability in IS will become a competitive advantage, also in our IT branch. I would like to ask you all in Hamburg to extend our network towards the outlined research center, and around the world to form a network for governance and sustainability in IS. This could mean no less than a real legacy for the digital native generation on this our wondrous planet.