ITU Regional Experts Group Meeting for Europe on *Increasing Role of Public Private Partnerships in the ICT Ecosystem - 25 Years of Telecom/ICT Sector Reform in Europe, and Beyond*, ITU Headquarters, Geneva, Switzerland, 14-15 November 2012

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Opening Roundtable: Setting the Context

- **Jaroslaw Ponder**, Coordinator for Europe, ITU
- **Knud Skouby**, Director, Copenhagen Institute of Technology, Denmark
- **Geoffrey Hamilton**, Chief, Cooperation and Partnerships Section
  United Nations Economic Commission for Europe UNECE
- **Peter H. Hellmonds,** Senior Adviser, International Chamber of Commerce - Germany
- **Christoph Legutko**, Global Public Policy CEE, Intel Corporation
- **Paul Hengeveld**, Microsoft UN Global Director, Microsoft

Ladies and Gentlemen, colleagues, friends,

First of all, a big "Thank you" (to Yuri Grin, moderator(s), previous speaker) for the opportunity to speak in this panel discussion on a topic that has been dear to me for more than 20 years now. I would like to share some of my experiences from those years with you in order to set the scene for the more detailed discussions to follow.

When I joined the World Bank in 1992 as a young consultant right after graduate school, my biggest desire was to bring the benefits of the ICT revolution and the Internet to people around the world. In particular I brought with me a desire to make sure that the benefits we experienced in the developed, industrialized world would equally become benefits to the rest of the world, and to those living on less than a few dollars a day. This was due to the experiences I made when I was living for a few years as a young businessman in Egypt during the mid 1980s, where I could witness first hand the crippling effect on business and human development when the telecommunication infrastructure was unable to cope with the demands of society and the economy.

At the World Bank, I started out in an industry department for the South East Africa Region, doing a study on how ICT could benefit the small island nation of Mauritius in its transition from an agriculture and textile industry-based economy towards a more service oriented information society. When I moved to the Policy and Strategy staff in the Bank, I pushed hard for extending the knowledge of the Bank to developing countries, and I am proud that I helped to jump-start the first Web-Server of the World Bank during my tenure there. I am equally proud for having brought the first instances of multi-stakeholder discussions and partnerships around the issues of ICT for Development to the World Bank 20 years ago, long before there was an *infodev* or a GICT department, and that I was able at the time to help bring a number of African countries onto the Internet with the use of some small amounts of grant moneys wisely spent on networking gear, training, and paying for connectivity to the next hub.

Multistakeholder activism in this area was not in fashion then. In fact, at the time, those who worked with me and I myself had the feeling that we needed to work almost in a clandestine way, because the official dictum at the World Bank at the time was to get out of telecommunications altogether, to

make way for privatization, deregulation, and to simply help governments in advising their ministries on how to privatize, how to deregulate, how to attract private investment, etc. This was the big topic at the time then, only a few years after the last World Conference (WATTC-88) that drafted the still existing Internet Telecommunication Regulations, which are currently in the process of seeing their first major revision in 25 years at the WCIT in Dubai this December. And the issue of involvement of other stakeholders in these discussions is hotter today even than it was back then twenty years ago. But I will come to this later during the discussion.

Deregulation and privatization have been with us then for a good part of the past twenty years, and I subsequently had a fair share in working on a few Public Private Partnerships as a financial manager for a large multinational, Asea Brown Boveri, also known as ABB. What I learned there during my financial negotiations and deal structuring of large PPPs in the infrastructure industries such as transportation and power generation is now a staple knowledge contained in a number of textbooks on PPPs.

In my experience financing infrastructure deals with a PPP in these industries involved 30 year time horizons that needed to be incorporated into the contracts and risk sharing deals. It required thinking about huge initial investments for construction and installation of the equipment and for long periods of predictable income streams from long-term offtake agreements after successful taking into operation of the plant. And it involved often quite specific legislation and undertakings by the government to assure exclusivity, and to provide other forms of risk sharing that would allow the lenders to provide the financing in these leveraged deals.

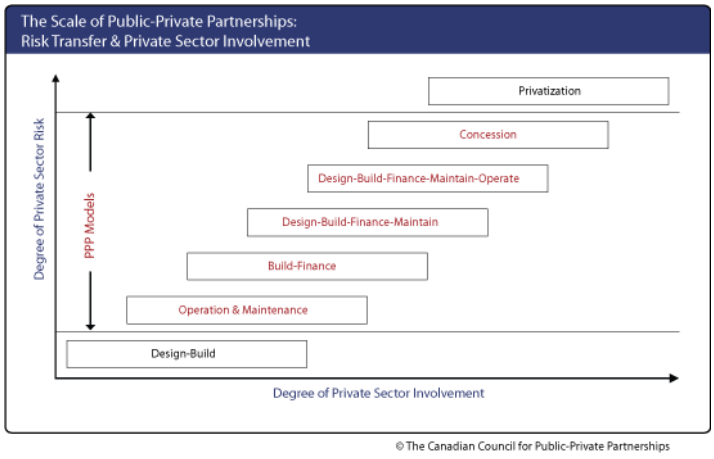

Figure 1: Risk Transfer and Private Sector Involvement in PPPs (Source: World Bank ICT Regulation Toolkit, citing the Canadian PPP Council)

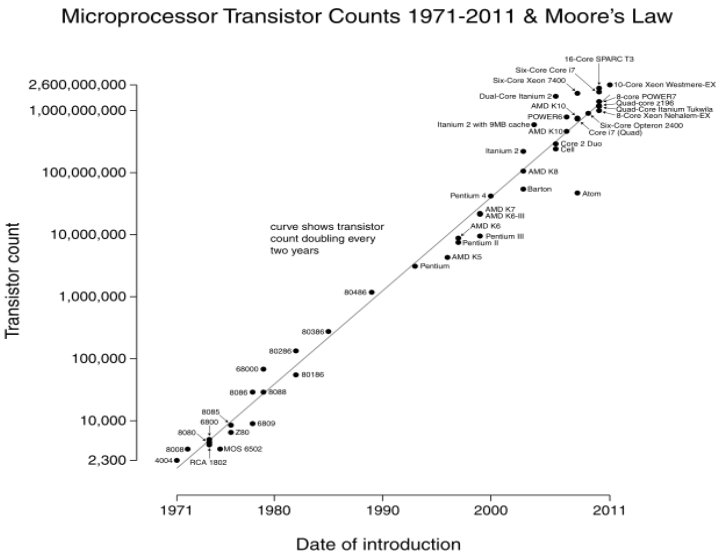

Figure 2: Moore's Law
Source: http://en.wikipedia.org/wiki/Moore's_law)

A few years later, I was engaged in the strategy development and in setting up of an e-Government competence center within the IT consultancy of Siemens, and what I learned there about PPPs in eGovernment challenged my previous understanding of the structuring of PPPs. Instead of huge initial investments with 30 year amortization cycles there was a constant stream of investments with gear that was obsolete within 2 to 3 years. Computers and information systems were operating according to Moore's law who noted that the number of components in integrated circuits had

doubled every year from the invention of the integrated circuit in 1958 until 1965 and Moore predicted that the trend would continue "for at least ten years". Well, as you all know, this trend is still valid today.

What I learned in those years, about ten years ago, was that PPPs in ICTs, in software and computer systems could not be structured in the same way as PPPs in the infrastructure sector, that most of the guidelines for setting up PPPs that were derived from the transportation and power energy and similar industries were simply inappropriate if not outright wrong for the ICT sector.

Type of Contract	Duration (years)	What the Private Contractor Receives	Nature of Private Contractor Performance	Examples
Service Contract (outsourcing)	1 – 5	Fee from government for performing a non-core service	Definitive, often technical type of service	Website design and management, ICT capacity building
Management Contract	3 – 8	Fee from government for the service and a performance-based incentive	Manage the operation of a government service	Call centre staffing; seat management, parking enforcement, regional water supply management
Lease	8 – 15	All revenues, fees or charges from consumers for the provision of the service; the service provider rents the facility from gov't / gov't pays to lease asset from private sector	Manage, operate, repair, and maintain (and maybe invest in) a service to specified standards and outputs / leasing asset (tangible intangible)	Land for ICT infrastructure development, existing airport or port facilities / gov't leases program from private sector
BOT (without concession)	15 – 30	The government mostly pays the service provider on a unit basis	Construct and operate, to specified standards, the facilities necessary for service provision	ICT infrastructure; e-procurement systems; e-business portals; network of kiosks
BOT (concession) or licence	15 – 30	All revenues from consumers service provision; the service provider pays a concession fee to the government and may assume existing debt	Manage, operate, repair, maintain and invest in public service infrastructure to specified standards	Telecom operations and expansion, new airport or seaport facilities, toll road or bridge

Figure 3: Models for PPPs
(Source: World Bank ICT Regulation Toolkit)

In ICT, it's not primarily hardware that is being shifted around, it is a service that is being provided. In eGovernment services, these two factors meant that deals had very different characteristics: first of all, according to Moore's law, the speed of innovation will also lead to quick obsolescence of hardware, and governments needed to learn that they could not simply continue with issuing purchase orders with precise specifications of equipment.

By the time those specifications were written into the tender documentation, they were already halfway obsolete. By the time the tender was answered, they were almost obsolete, and by the time the contract was awarded and the hardware delivered, the next generation was already selling out in the stores. A good example for that are the digital terrestrial radio devices for the German police in the BOSnet project. You will notice that they are in the rollout phase today, but they use the pretty obsolete Tetra-1 standard, which does only provide for limited data transmission capacity.

The other challenge was in determining how to measure outputs of services. If you put a PPP in charge of the national passport authority, as has happened in the UK, or the unemployment benefit office of South Africa, how do you measure output and success? The key here is to build performance indicators an incentives into the contract, and to allow the private sector operator to provide public services with efficiency in mind, without describing exactly with what kind of technology the service is supposed to be provided. Taking into account Moore's law, and efficiency increases through process improvements, the way to go was to negotiate a base line for the upper limit of the costs, and to make a profit sharing arrangement between the private operator and the public partner so that both sides would benefit from any improvements. By structuring incentives those PPPs allowed the private

partner to make a decent profit, and assured the public authority that the public interest would be safeguarded.

Now, for the past eight years I have been engaged in the telecoms sector which by then had been thoroughly transformed into a private sector undertaking, with a very few exceptions. We have witnessed a tremendous growth in connectivity, both in basic telephony and in advanced broadband Internet services. Yet we have also seen that - with the rising popularity of broadband Internet - there comes the expectation that the operators should provide it to all of the people, regardless of where they live. Naturally, private operators have made their calculations and figured that rollout of wired infrastructure to remote locations was far from being profitable and most regulators have been wise enough to refrain from imposing a universal service obligation concerning Internet connectivity.

This has left us with a growing digital divide, not just between industrialized and developing economies, but more specifically within countries between the urban connected digiterati and the rural unconnected. This in-country digital divide is not an esoteric issue related to the United Nations and the ITU or the World Summit on the Information Society, but it is an issue of economic chances and the ability to participate in the information society that affects people all over the world, whether they live in Germany, Australia, in Canada or the USA, or anywhere else on this planet. People and companies have started to shy away from rural areas because they cannot get online there, with a resulting decline in general attractiveness, population and economic activity in those areas, which is further exacerbating the problem.

Because more and more people now see Internet connectivity as a right, and some civil society organizations even calling it a human right, they go to their congressmen or their mayor, and those in turn write letters to the operators, demanding a rollout of broadband in their regions.

It is here where we start seeing the return of the public interest in the provision of this infrastructure and the associated services, and which is at the core of our discussion today. While in other sectors, the traditional discussion around PPPs has been about the introduction of the private sector into providing public goods, here in telecoms and ICT we see the reemergence of the public sector as a provider of public goods in the eyes of insufficient supply. It is not a question of market failure, but of different priorities where the public interest of providing connectivity to all outweighs the economic imperatives of the market.

We are looking at a situation where we need to examine the relationship of state and market on the one axis, and whether to focus on the supply side (i.e. infrastructure provisioning) or the demand side (i.e. delivery of services to the public) on another axis. We should also try to look at a third axis, that is between a focus on investment and on innovation. And it would be too simple to say that the focus of the state is always purely on infrastructure and investment whereas the private sector focus would be on innovation and services.

In fact, if we look at a few of the successful examples in PPP in the telecom sector, we notice that some of the more innovative schemes combine infrastructure and services, build innovation into the scheme, and combine private and state investments.

Ladies and Gentlemen, I would like to conclude here for the time being and give the word back to the moderators. Thank you.