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June 18, 2015

Speech IPv6 Business Konferenz

Ladies and Gentlemen

Welcome to the fourth IPv6 Business Conference here in Zurich! I am especially pleased that a conference dedicated to such an important topic for the future and development of a crucial tool like the Internet is being held in Zurich. In my opinion, this is not without reason!

Let me begin with a thesis: “Without Zurich there would be no Internet – but without the Internet, there would be no Zurich as we know it today.”

The World Wide Web – often used synonymously with the Internet – is a Swiss invention which we owe, however, to Geneva-based scientists at the European Organization for Nuclear Research “CERN”. In 1989, Tim Berners-Lee introduced a hypertext system that allowed him to share information and research results easily with fellow scientists. The first web address was www.cern.ch. The *.ch* (*dot ch*) indicates that, though the inventor was British, the Internet is a Swiss invention. Clearly, twenty-six years ago, no one was concerned about the capacity limits of IP addresses. But the invention of the World Wide Web was in fact just a logical consequence of earlier inventions. The most notable one –and this is something historians largely agree on– was the invention of the wheel. What is more: the oldest full disc wheel in Europe was discovered in Zurich and dates back to roughly 3400 BC.

I will not go into detail here about the countless pioneering achievements of Zurich and other Swiss citizens that followed over the centuries and millennia. But let me say this much: without Albert Einstein –who studied at Zurich’s Federal Institute of Technology (ETH)– and his theories, there would be no transistors and, therefore, no computers. And without the mathematician Leonhard Euler – though from Basel– we’d probably still be trading livestock in market squares. By the way, Euler also happens to be the inventor of the Latin square, a precursor to Sudoku. Let me also mention computer scientist Niklaus Wirth, born in

Winterthur in 1934. Among other feats, he designed the popular programming language “Pascal” and, as early as in the 1980s, also built model helicopters that could fly autonomously. In 1980, Wirth brought over computer mice from the US to Europe, based on which the world’s first serial mouse was created by the Swiss company Logitech.

And where would we be today without mice, touchpads and other accessibility tools?

Thus, with that, the first part of my thesis appears to be sufficiently proven: without Switzerland and without Zurich: no Internet, or rather, no World Wide Web.

So let’s move on to part two: without the Internet, no Zurich as we know it today. The word “globalisation” surfaced as early as in the 1960s and means the ever stronger global interconnectedness of business, culture and society. Globalisation is the successor of colonialisation and is based primarily on the global differences of raw material, energy and wage costs as well as on cost-effective options of goods transport.

However, it was only after the spread of the Internet, from the mid-1990s onwards, that globalisation experienced a real boost. Business, as we know it today, would be inconceivable without the Internet: company units are set up according to where the best conditions prevail; internal corporate processes are conducted online. In lieu of physical meetings, e-mails are sent and video conferences held. Today, roughly half of the world’s population have access to the Internet, whereas approximately a third own their own computer. The Internet is the network of companies, globally, but also nationally and regionally.

Zürich has benefitted significantly from globalisation. Numerous international headquarters desiring legal security, favourable and reliable long-term tax terms & conditions, paired with a proximity to universities and a skilled workforce, have settled in the Greater Zurich Area. Not to mention the banks that, in recent decades, have come to figure among the most important global players – and, at times, have also faced falling flat on their faces.

Thus, on the one hand, the economic significance of the Internet is reflected in the opportunities that the Zurich economic area has been able to make best use of in the context of globalisation. On the other hand, more specifically, the benefits are also reflected in the jobs that have been created in Zurich through the Internet itself.

Zurich has become the centre of the Swiss ICT industry. No other canton has as many skilled specialists and business start-ups in this field. The ICT sector in the Canton of Zurich generates a third of Switzerland’s total value added from ICT. And the trend is upwards. In recent years, large international corporations, such as Google or Disney Research, have chosen to settle in the city on the river Limmat. IBM has already been in Zurich with a renowned research and development centre for several years. And only thirty per cent of computer scientists in Switzerland are actually employed in companies that belong to the ICT sector; the remaining seventy per cent apply their skills to other industries,

such as financial services, wholesale trade, management consulting or also administration.

In 2011, the gross value added of ICT in Switzerland amounted to approximately 29.2 billion Swiss francs. This corresponds to a share of 5.4 per cent of gross value added. The share of the ICT sector in the Canton of Zurich was 8.3 per cent of gross value added. Diversification of Zurich's economy has been an important contributing factor to the latter's stable growth trajectory since the 2008 financial crisis. In this respect, the two clusters "Life Sciences" and "ICT" have played a key role, offering strong future prospects – provided we succeed in setting up the basics such as IPv6. In future, the Zurich Innovation Park will be a further major endeavour that will facilitate networking between companies and science beyond conventional cluster boundaries.

But the world is in a continuous state of change. It remains to be seen whether the favourable tax conditions and, thus, the headquarter activities will remain. This presents the greatest risk: standing still is not an option because, then, others will not just catch up, they will outpace us. Switzerland as a business location must continue to develop. Favourable tax conditions are but a fraction of the strengths that Switzerland and Zurich have to offer as a business location. As alluded to earlier: Zurich's universities and universities of applied sciences figure among the best in the world – which is confirmed not only in terms of ranking but most notably by way of first-rate scientists and prestigious awards. Today, scientists are experts at networked thinking and action – after all, they invented the Internet for precisely that purpose.

A further, important advantage is legal security that is reflected in political stability, but also in good spatial planning, energy supply, safety of buildings, precautions to protect from environmental disasters and health care.

For Zurich as a business location, platforms such as eZürich are also extremely valuable: this is where decision-makers from business, research and administration can network, where ideas and demands can be postulated and where the ICT cluster is given a voice. eZürich is project-based and thus grows organically. Zurich need not and cannot become a second Silicon Valley. But –if not yet in place– the conditions for expanding the ICT cluster must be created! eZürich, which was originally launched by the City of Zürich, provides a good basis for becoming a hub to be taken seriously in Europe. That is why the Canton of Zurich took over eZürich as a platform within the Division of Business and Economic Development, in the context of cluster management.

Thus, looking to the future, we need an Internet that works well. This brings me to IPv6. I am of the view that it will be helpful for the Swiss economy and the Internet community if the Federal IT Steering Unit (FITSU) issues clear guidelines. We need ideal conditions to continue the development of the economic cluster ICT. The more Internet users introduce IPv6 at the earliest possible time, the less costly it will be to set everything up. In this connection, let me give you an outlook on the project .zuerich, the new top-level domain. The Canton of Zurich is assuming a pioneering role that will not only prevent future abuse of the



ending .zuerich, but will also enable exclusive use of this ending. The Government Council of the Canton of Zurich is now placing this on the basis of an ordinance; the envisaged start is middle of 2016. .zuerich is to be available to the Zurich economic area and will of course be IPv6-ready. In this way, we will likely have a pioneering role within the administration as well.

In closing, let me refer again to the inventor of the World Wide Web, Sir Tim Berners-Lee. A few weeks ago, Tim Berners-Lee, who is sixty, gave an interview in the Sunday edition of the NZZ newspaper and expressed a vision which I, too, see for the Zurich economic area. This is what he expressed: *“Switzerland had banking secrecy for a long time and has always had the reputation of being a safe haven for money. Well, Switzerland could set up data secrecy and become a safe haven for data, and be that for the entire world. Besides providers who store data here safely and encrypted, a second element is required. An internationally applicable set of rules that define which data may be supplied under which conditions. Foreign authorities would need to submit a request for judicial assistance, and then a Swiss judge would decide on the matter. That would be a great model.”*

I am making this vision my vision, too, for the Zurich economic area and the ICT cluster. IPv6 provides an important basis for this.

Thank you very much for your attention.