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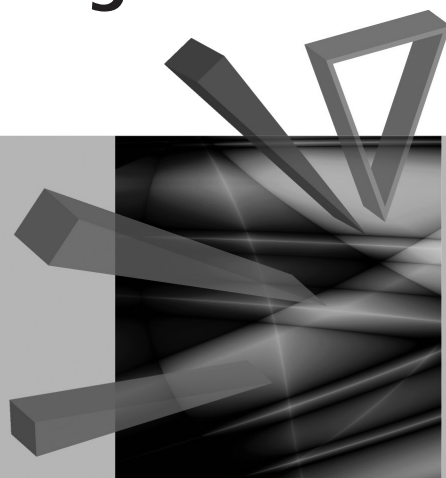
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Innovation as a Factor of the Development of the Asia-Pacific Region



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PRINCIPLES OF INTERNET GOVERNANCE. ECONOMIC GROWTH AND INNOVATION IN ASIA

Summary: The spread of the Internet tremendously increased importance of knowledge in economic activity. Originally the Internet was largely self-regulated, which did not please certain Asian states, sceptical towards the civil society concept. Certain technical elements of the original Internet set-up are close to exhaustion, which requires a global consensus in terms of Internet governance. The process will remain decentralised and economically too significant to voluntarily self-exclude oneself from decision-making. Asia either acknowledges that the only credible Internet community may participate in the dialogue, and thus indirectly influence talks, or will be compelled to accept solutions reached in states whose importance in the global economy has diminished over recent years.

Keywords: economic governance, Internet, Asia.

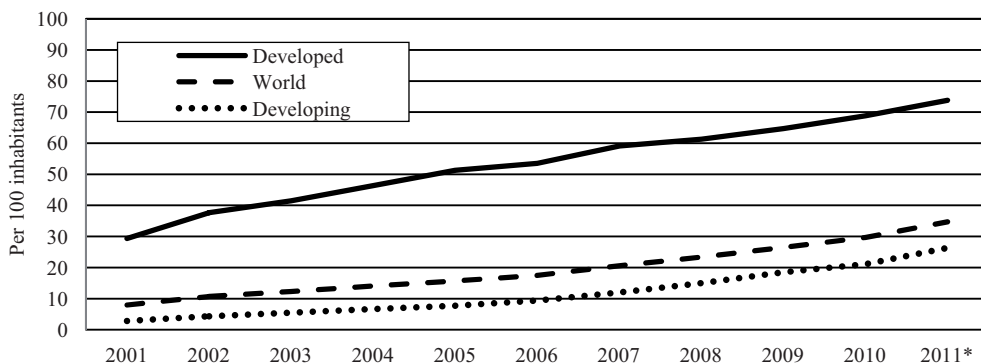
1. Introduction – the wild Internet

Since its launch in the 1990s, the Internet has spread at a tremendous pace, gradually becoming a fundamental tool of communication, commerce and entertainment. By the mid-1990s, it was already used by 11 per 100 inhabitants of developed countries (global average amounted to 2%), and tripled in just five years (in the meantime the global average quadrupled). In 2011 the Internet was used by 73.8% in the developed world and by 34.7% globally (see Figure 1).¹ In the early 1990s few understood how the Internet would be harnessed for everyday life, yet it was clear that it would transform it fundamentally. It remained to be decided whether development of the web should proceed according to its own dynamics or in a centrally-regulated way.

Perhaps the most important factor that shaped the early Internet was adoption of the Framework for Global Economic Commerce by Clinton's administration.² Following 18 months of public consultations by an interagency working group chaired by

¹ In absolute terms the number of users globally grew from 495 million in 2001 to 2.3–2.4 bn in 2011, ITU, *statistics*, <http://bit.ly/HJ69W2>, <http://bit.ly/IMPLXK> and <http://bit.ly/HLJNVz> (accessed: 15.04.2012).

² White House, *The Framework for Global Electronic Commerce*, 1997, <http://1.usa.gov/HNEggk> (accessed: 15.04.2012).



*Estimate.

Figure 1. Internet users per 100 inhabitants, 2001–2011*

Source: ITU World Communication/ICT indicators database.

the Vice President Gore, the document recognised the Internet’s potential to “become the United States’ most active trade vehicle within a decade”. The so-called “Clinton’s Internet Policy”, based on the liberal and market-oriented model,³ stipulated five key principles of governance. 1) The private sector shall lead in the market process, while the government shall encourage self-regulation. 2) Governments were advised to avoid undue restrictions on electronic commerce, and where state intervention was needed (3) “its aim should be to support and enforce a predictable, minimalist, consistent and simple legal environment for commerce”. 4) Governments were called to recognise the unique qualities of the Internet, which required a different legal approach as compared to the telecommunication, radio and television sectors. Finally, (5) electronic commerce on the Internet was to be facilitated on a global basis. Those general principles translated into a set of substantive recommendations on tariffs and taxation, electronic payment systems, common commercial codes and IT standards, IPRs protection, privacy and security rules.

In order to exercise a collective government of the Web, the Internet community self-organised. Societies such as the Internet Engineering Task Force (which publishes technical documents to influence the development of the Internet), the World Wide Web Consortium (which develops common protocols and guidelines for the Web), or the Internet Society (soliciting for greater Internet accessibility around the globe)

³ The US liberal and decentralised approach at the time, embodied by the US-supported TCP standard, ensured open architecture of the Internet, including a possibility of continuous communication even in the case of partial disruption of the network, which was confronted with the European vision of the X.25 preserving greater security and state control over the Web communication (P. Czerpak, *Znaczenie technologii informacyjnych i komunikacyjnych w stosunkach międzynarodowych a pozycja USA*, [in:] K. Kłosiński (Ed.), *Stany Zjednoczone. Obrona hegemonii w XXI wieku*, Wydawnictwo KUL, Lublin 2009, pp. 353–372).

emerged. Certain tasks originally performed by the US government (related) agencies were transferred to the Internet Corporation for Assigned Names and Numbers (ICANN, including coordination of IP addresses spaces, assignment of address blocks to regional Internet registries). For instance, the ICANN is currently in the final stage of multi-stakeholder negotiations on internationalisation of the domain name space (DNS) system by introducing new generic top-level domains (TLDs).

Over the subsequent fifteen years this liberal approach based on market self-regulation has been attacked from all political directions.⁴ The conservative criticism concentrated on the protection of family life and traditional values, as well as national security. Liberals, while praising Internet freedom of expression, were concerned about privacy protection and electronic commerce rules.

Given the comparable amount of criticism that the current governance model raises among principal groups according to political preferences, one may assume that while it is not an ideal solution, it embodies a reasonable compromise between protection of private and public goods. Furthermore, even if the solution in force does not respond to one's particular demands, there is no alternative to opting for its reconstruction from the inside. Rejection of the rules in place altogether would merely entail a self-exclusion, which in the era of the knowledge-based economy perhaps constitutes one possible strategy of national development, but shall not occur involuntarily or even unwittingly. This, however, appears to be an unintended result of policies adopted by certain Asian states. Given the self-regulatory architecture of the Internet, where actors willing to participate in policy-making ought to obtain a credibility in the eyes of the e-community, which is considerably more difficult while acting upon direct command of public authorities, too much state-intervention may prove counter-productive. Furthermore, considerable human capital indispensable to adopt, and not merely manufacture, the Internet and communication technologies, especially where country already lags behind the most IT advanced economies, may be obtained in a cheaper and quicker way in a decentralised, permissive environment.

Given the regulatory aspirations of most Asian states the question is whether it is a viable alternative to the mainly US-based liberal approach. Arguably not. If that proves to be the case, what can be the consequence of maintaining policies favouring central regulation? Most likely self-exclusion from Internet governance and in extreme cases economic losses although, as showed in the paper, certain Asian states managed to maintain position among the world's Internet elite, despite certain authoritarian-like tendencies.

The article is organised as follows. First, the problem of Asian digital split (within the region and globally) is introduced; a distinction between technologies manufacturing and adoption is drawn. In the second part core problems of the relation between freedom of expression and development of Internet technologies in Asia

⁴ A. Thierer, 15 years on, President Clinton's 5 principles for Internet policy remain the perfect paradigm, *Forbes*, 12 February 2012.

are signalled. In the subsequent part dilemma of central regulation and voluntary cooperation is explained, including perils stemming from both approaches. Part five focuses on the Internet governance principles *per se*. In the conclusion section, the parts concerning economic importance of the Internet, the Internet architecture and governance principles are synthesised.

2. Asian digital split

The major promise of the Internet was to provide an instant and cheap means of communication independently of users' location. It was perceived as a chance to integrate into the global economy even the tiniest communities, who thanks to their labour efficiency could attain economic growth.⁵ It was even argued that the late-comers could exploit the information and communications technologies (ICT) more efficiently due to opportunity to emulate technically advanced solutions without incurring tinitial research expenses ("fast follower" advantage) and no sunk costs in older technologies ("leapfrogging" advantage).⁶

Over time the Internet started, however, to divide rather than unite. Rapid replication of technologies already requires considerable human capital and inevitably results in delays. Also the "hard" physical capital (infrastructure) and the "soft" social capital (such as regulatory practices or efficient financial markets) must be available. Several factors deserve closer attention.

Considering availability of the ITCs, one cannot focus on the production but rather on its adoption by other sectors of the economy, indispensable to compete in the global knowledge-based economy. Although the ICT production for three decades has constituted a source of growth for many Asian economies, the labour-efficiency in production is not paramount to knowledge-intensity and fast innovation cycle.

Failure to absorb the ITC advancements at the national plane results in a digital divide (digital split).⁷ The Internet access problem reflects nation's wealth, telecommunication infrastructure, urbanisation and stability of the government (but not literacy level, political freedom or English proficiency).⁸ Huge disparities in

⁵ According to the US ambassador to the OECD, Karen Kornbluh, in 15 years the Internet had greater impact on the labour market then the Industrial Revolution in 50 years time, Brookings Institution, 11 January, 2012.

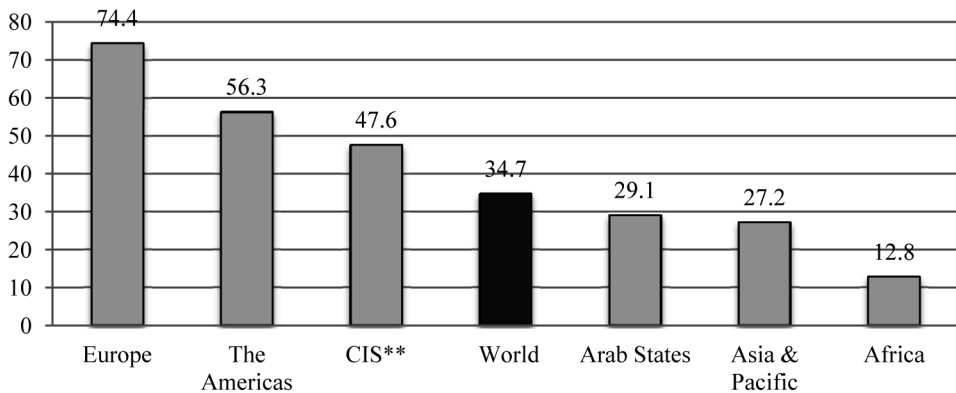
⁶ P.K. Wong, *ICT Production and Diffusion in Asia: Digital Dividends or Digital Divide?*, Centre for Management of Innovation and Technopreneurship National University of Singapore, Reference No. WP2001-02, 2001.

⁷ S. Crawford, The new digital divide, *The New York Times*, 3 December 2011; M. Brignall, Consumer group warning over Internet exclusion, *The Guardian*, 8 May 2009.

⁸ H. Xiaoming, Ch.-S. Kay, *Factors affecting Internet development: An Asian survey*, 2004, <http://bit.ly/HM3zjR> (accessed: 15.04.2012).

Asia provide a notable example in this respect.⁹ Also within Internet users' class one ought to distinguish users with access to a broadband connection, since a high-speed data transfer is necessary for a growing number of applications. As jobs, commerce and services, entertainment, politics and a growing number of public services move online, those without an adequate Internet connection risk social exclusion.¹⁰ The digital divide has a negative influence on economic equality (with a growing number of crucial information available online only), social mobility, democracy and economic growth (as a means of productivity improvement).¹¹

While in 2001 the split between number of Internet users per 100 inhabitants in developed and developing countries amounted to 29.4% against 2.8%, by 2011 the difference grew to 73.8% to 26.3% (ITU) (compare to Figure 2). Although in December 2011, 44.8% of Internet users were to be found in Asia (1 bn out of 2.3 bn users), the Internet penetration rate in Asia remained at 26.2% (61.3 % in Europe and 78.6 % in North America), which is even below the world average (32.7%) (see Figure 3).¹²



* Estimate; ** Commonwealth of Independent States.

Figure 2. Internet users per 100 inhabitants in 2011*

Regions are based on the ITU BDT Regions, see: <http://www.itu.int/ITU-D/ict/definitions/regions/index.html>. Source: ITU World Telecommunication /ICT Indicators database.

⁹ R. Devraj, *Digital Divide Sharpens Rich-Poor Gap*, Inter Press Services, 21 July 2000, <http://bit.ly/HM36yh> (accessed: 15.04.2012).

¹⁰ Department for Communities and Local Government (UK), *Understanding Digital Exclusion. Research Report*, Wetherby 2008.

¹¹ Internet World Stats, *The Digital Divide, ICT and the 50x15 Initiative*, 2004, <http://bit.ly/HM-16WL> (accessed: 15.04.2012).

¹² Internet World Stats, 31 December 2011, <http://bit.ly/HHwVCA> (accessed: 15.04.2012).

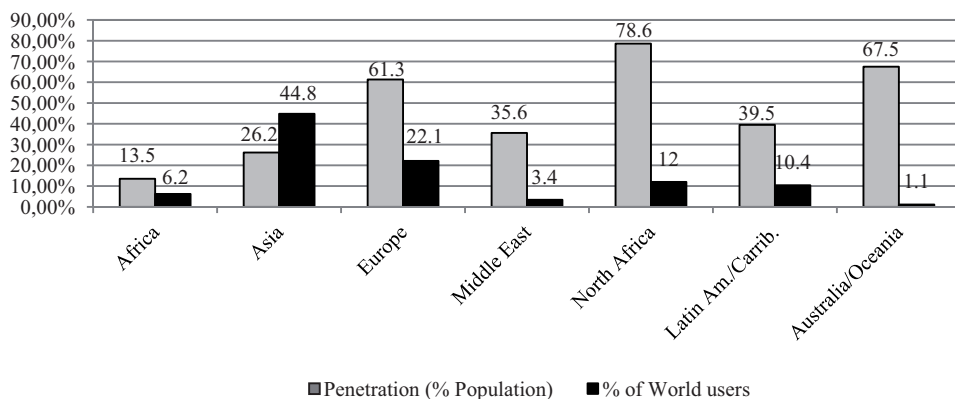


Figure 3. World Internet Usage Statistics, 31 December 2011

Source: based on Internet World Stats.

Analysing relevance of the Internet for Asian societies, one needs to take into account huge disparities between regions and factors impeding Internet integration. High tensions between neighbouring areas are not uncommon (e.g., strenuous relations between South and North Korea or China and Taiwan). The level of economic development is also very unequal (e.g., Indian or Chinese megalopolis and rural areas). To some extent, this explains why the Internet revolution, which started in Asia relatively late and proceeded slowly, concentrated in six countries: Japan, Korea, Taiwan, Hong Kong, Singapore and Thailand.¹³

Average access to the Internet (number of users per 1000 people) in 2007 for Asia, excluding the Middle East, remained at 142.¹⁴ This included both, almost unchanged in comparison to the proceeding year, ratio of 3.2 users in Bangladesh, 4.8 in Cambodia and 0.8 in Myanmar as well as 763 user in South Korea, 688.5 in Japan and 699 in Singapore. The average Internet access in India was estimated at 69.3 and in China 160 (here, however, the progress is quick given that it grew from 105 in one year and was supposed to attain 223 in 2008).¹⁵ Huge disparities are also observable in terms of Internet hosts number and number of PCs *per capita*.¹⁶

While the average connection speed for South Korea (16,736 kps) or Japan (8,940 kps) are among world's fastest,¹⁷ Taiwan (4,068) and Thailand (3,422 kps) are

¹³ P.-H. Ang, Ch.-M. Loh, *Internet Development in Asia*, <http://bit.ly/HM5gh9> (accessed: 15.04.2012).

¹⁴ World Resources Institute, *Earth Trends. Access to Information: Internet Users per 1000 People*, based on ITU, World Telecommunication Indicators, Geneva 2009; L. Press, *The State of the Internet: Growth and Gaps*, 2000, <http://bit.ly/IPIgPS> (accessed: 16.04.2012).

¹⁵ World Resources Institute, *op. cit.*

¹⁶ Caslon Analytics, *Digital Divides in Asia*, <http://bit.ly/IPJeLU> (accessed: 16.04.2012).

¹⁷ The average transfer speed for the US is 6,137 kps, in Canada 5,948 kps, Germany 5,264 kps, Poland 4,303 kps and France 3,642 kps, Akamai, *The State of the Internet. Q3 2001*, <http://www.akamai.com/stateoftheinternet/> (accessed: 16.04.2012).

still doing well, Uzbekistan (542 kps), Tajikistan (602 kps) or Bangladesh (670 kps) are lagging behind. The situation is not much better in India (942 kps) or China (1,391 kps).

Looking at the high broadband popularity (over 5 Mbps) this image is even worse. Apart from South Korea (79%), Japan (56%), Myanmar (21%)¹⁸ and Thailand (11%), it oscillates between 0 and 2%.¹⁹ Even broadband adoption (over 2 Mbps) is uneven: 93% in South Korea, 78% in Japan, 73% in Thailand and 49% in Myanmar, but at 3% in Uzbekistan and Tajikistan, 7% in Turkmenistan, 10 and 18% in India and China.²⁰

The general “Networked Readiness Index” also reflects those disparities including Singapore, Taiwan and South Korea (respectively 2nd, 6th and 10th place in the global ranking), and Tajikistan, Bangladesh or Nepal (respectively 112th, 115th and 131st place among 138 countries classified).²¹

As studies reveal, a gap in the ICT adoption intensity between advanced and developing economies is wider than disparities in GDP *per capita*, especially in terms of Internet-related indicators (availability of Internet hosts and secure e-commerce hosts).²² Furthermore, the ICT adoption disparity is higher than the Competitiveness Index, which may suggest that the digital divide will deepen. While Japan and NIEs (Korea, Indonesia, Malaysia and Singapore) experienced above average ICT diffusion, some (Hong Kong, Taiwan, Indonesia, Philippines, Thailand, China, India, Pakistan) lag behind. It has been argued that correlation between the ICT production competitiveness and diffusion intensity is significantly weaker than the correlation between GDP/*capita* or competitiveness index and the ICT diffusion (and in Asia that is even truer than elsewhere).

3. The Internet freedom and the ITC development in Asia

As the ICT production does not shield from the global competition, two challenges shall be addressed in greater detail: regional cooperation needed for regional spillovers and support for the adoption of new technologies in the entire economy, easier in the case of market deregulation.

Even though the Internet censorship rate *per se* does not reflect national ICT innovation potential, yet given a dire need of investing in the regional human capital

¹⁸ Although the connection quality in Myanmar is high, it is almost unavailable (see above).

¹⁹ In the U.S. 44% and 47% of the connections in Canada provide transfer capacity over 5Mbps. The same quality is available to 33% in Germany, 23% users in Poland and 15% in France (Akamai, *op. cit.*).

²⁰ The same is available in 80% in the U.S. and 90% in Canada. Broadband is also used by 93% in Germany, 81% in Poland and 81% in France (*Ibidem*).

²¹ The Global Information Technology Report 2010–2011. Transformations 2.0., 10th anniversary edition, World Economic Forum, Geneva 2011.

²² This disparity was even higher among Asian states (Wong, *op. cit.*).

and promoting cooperation it is a factor to bear in mind. The central supervision over the Web is mostly felt in authoritarian regimes, such as Burma, China or Vietnam, but even democracies of Japan and Korea occasionally relent to the control temptation.²³ According to the Freedom on the Net Index,²⁴ in terms of oppressiveness China²⁵ gives precedence only to Tunisia and Cuba, while two other Asian countries included in the study (Malaysia and India) are only partly free.²⁶ Out of twelve Internet enemies in 2012, ten are to be found in the Middle East or in East Asia.²⁷ The level of global integration is also indirectly reflected by social networks popularity. While in 2011 Facebook dominates in the majority of states, Vietnam's government in a failed censorship attempt offered a national social-network alternative (Zing).²⁸ China tries to compensate a Facebook-ban (since 2009) with the QZone network.²⁹ Facebook is also banned in Mauritius and Syria.³⁰

The conviction that a free flow of information leads to economic liberalisation and democratisation constituted foundations of the President Obama's International Strategy for Cyberspace³¹ and the State Secretary Clinton's Internet Freedom Agenda³² (containing freedoms of expression, association and assembly online). Both documents list the "the ability to seek, receive and impart information

²³ J. Abbott J., *The Political Economy of the Internet in Asia and the Pacific: Digital Divides, Economic Competitiveness, and Security Challenges*, Praeger Publishers, Westport 2004, pp. 1–12.

²⁴ Countries are assessed in terms of Internet access, contents limitations and users rights violations from 0 to 100. 0 denotes an absolute freedom. Countries scoring 0–30 are considered free, those in between 31 to 60 as partly free, while a score above 61 indicates oppressive environment (Freedom House, *Freedom on the Net. A Global Assessment of Internet and Digital Media*, 1 April 2009).

²⁵ For more censorship, the Chinese Communist Party and economic growth see B. Minteh, *Internet Censorship and Economic Growth in China*, The Global Vision Institute, <http://bit.ly/J5MaUr> (accessed: 16.04.2012).

²⁶ China scored 78 points for Web and 85 for press freedom. India 34 and 36, respectively. Malaysia merely partly liberal in the Internet areas (40) is more rigid towards the press (65 points) (Freedom House, *Freedom on the Press 2009*, 2009).

²⁷ Reporters without Borders, *Internet Enemies*, <http://en.rsf.org/> (accessed: 16.04.2012).

²⁸ H. Chip, Vietnam: state of social media one year after facebook block, *Global Voices*, 25 January 2011.

²⁹ V. Cosenza, *La mappa dei social network nel mondo – dicembre 2011*, <http://www.vincos.it> (accessed: 16.04.2012).

³⁰ Maurice censure le site communautaire Facebook, Mauritius Today, 13 November 2007, <http://bit.ly/HGLqlm> (accessed: 16.04.2012); Y. Oweis, *Syrian Users of Facebook Said on Friday the Authorities had Blocked Access to the Social Network Web Site as Part of a Crackdown on Political Activism on the Internet*, Reuters, 23 November 2007.

³¹ B. Obama, *International Strategy for Cyberspace. Prosperity, Security, and Openness in a Networked World*, Washington, May 2011.

³² See: Secretary Clinton stressing role of the Internet for the Arab Spring (H. Clinton, *Internet Rights and Wrongs: Choices & Challenges in a Networked World*, George Washington University, 15 February 2011, transcript and video-recording, <http://1.usa.gov/ISTqRj> (accessed: 16.04.2012)). The project raised criticism, including funding availability and arbitrary practices (M. Schulaman, The State Department's shameful record on Internet freedom, *The New Republic*, 8 August 2011).

and ideas” among core principles of Internet management. Although the direct relation between freedom of expression and economic development is sometimes questioned,³³ it is safe to say that in the “Internet economy” the ICT may provide opportunities for employment, productivity, education, health and public services and help to address environmental and demographic concerns; become a driver for the creation of enterprises and communities and tighten cooperation; through civic engagement and participation promote transparency, accountability, privacy and trust; empower consumers and users in online transactions; reinforce security of information systems and networks, and their users; provide a platform for research, scientific cooperation and innovation.³⁴ To this ends, the OECD leaders agreed in 2008 to “uphold the open, decentralised and dynamic nature of the Internet and the development of technical standards that enable its ongoing expansion and contribute to innovation, interoperability, participation and ease of access”.

4. Collective self-regulation vs. central authority

Reflecting on the Internet governance³⁵ and its impact on economic growth, one may observe a paradox. On the one hand, the history of the Web, for instance, the open-source software, shows that unharnessed creativity of users interacting and cooperating cannot be matched by a centralised system. On the other hand, in order to make communication feasible, parties involved have to use the same “language” – from the programme scripts through the Internet infrastructure. Hence, integration and transparency depend on the technical coherency. Otherwise we risk “balkanisation” of the Web behind geopolitical frontiers.³⁶ At the same time, greater coherency by central-regulation entails a threat of limiting Internet’s utility.

Now functioning of the Internet requires solving endless standardisation issues. The most recent examples include adoption of TLDs and flexibility to national languages,³⁷ transition from IPv4 to IPv6, semantic web development,

³³ The Internet access does not necessarily weaken authoritarian regimes (E. Mrozov, *The net delusion: The dark side of internet freedom*, *Public Affairs* 2011).

³⁴ OECD, *The Seoul Declaration for the Future of the Internet Economy*, Seoul, 17–18 June 2008.

³⁵ The World Summit defined the Internet governance as “the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet” (ITU, *Tunis Agenda for the Information Society*, 18 November 2005, par. 34 (ITU document no. WSIS-05/TUNIS/DOC/6(Rev. 1)-E).

³⁶ Expression used by Darell West, the Brookings Institution, 11 January 2012.

³⁷ At the same time, the development of the TLDs provides opportunities for IPRs protection thanks to access requirements, which again worries freedom-concerned disputants. Adoption of defensive registration and consumer protection practices will depend on the ICAAN’s reputation for its autonomy from (the US) administration and its capacity of forging a global consensus, L. Strickling, the US Assistant Secretary for Communication and Information and Administrator, the Brookings Institution, 11 January 2012.

cloud computing challenges or current negotiations on the revision of the 1988 International Telecommunication Union treaties (possibly bestowing the ITU's standards recommendations with a legally binding force, transferring upon it the ICAAN's naming and numbering competences or broadening its powers in terms of peering and termination charges; some even suggest including cyber-security and cyber-crime provisions in the ITU treaties). Even a brief glance at proposed innovations reveals how thin the line dividing harmonisation and central regulation is. The latter approach by threatening disruption of national networks endangers the entire Internet. Also regulatory delays behind the web reality are inevitable, given that the online communication is one of the most dynamic social life areas.

The Internet dynamics raise yet another challenge – a choice of policy goals. The “command and control” approach functions only where targets are clearly defined or quickly identifiable, and it is supported by enforcement mechanism.³⁸ Without going into sanctions efficiency, it is fair to notice that, at least in terms of technical standards, failure to adopt common rules results in self-exclusion; therefore, an attempt to coercively impose Internet practices would be paramount to forcing one to socialise. As a substantial information asymmetry between the regulator and market actors subsists, the responsibility shall be ceded to the other party. Inclusiveness and openness should be attained by a collective action of Internet users.

5. Internet governance

A couple sets of principles on the internet management have been recently enacted including the OECD's *Principles for Internet Policy-Making*.³⁹ The Council of Europe adopted *Declaration on Internet Governance Principles* and UNESCO's *Code of Ethics for the Information Society*.⁴⁰ While all three adopt different approaches, in line with a profile of the hosting organisation, they share fundamental assumptions about Internet governance: 1) open and decentralised architecture, 2) multi-stakeholder process, 3) Internet user's duties towards society.

In connection with the first assumption, the first two of OECD's principles constitute a basis for the global⁴¹ free flow of information and “open, distributed

³⁸ M. Faure, G. Skogh, *The Economic Analysis of Environmental Policy and Law: An Introduction*, Edward Elgar Publishing 2003, pp. 189–208.

³⁹ OECD, *Communiqué on principles for Internet Policy-making*, Paris, 28–29 June 2011. On 13 December 2011 the OECD Council adopted a recommendation thus officially endorsing those principles. Also earlier the OECD had engaged in the subject-matter debate: *Guidelines for Consumer Protection in the Context of Electronic Commerce* (1999), *Guidelines on the Protection of Privacy and Transborder Flows of Personal Data* (1980).

⁴⁰ The Council of Europe, *Declaration on Internet Governance Principles*, 21 September 2011; UNESCO Doc. no. 36 C/49, 10 October 2011.

⁴¹ The Council of Europe, *op. cit.*, Principle 5, *Universality of the Internet*.

and interconnected nature of the internet".⁴² Both are strongly tied, since the Internet economy growth requires a free movement of information, achievable only in the case of convergence between regulatory zones⁴³ (at the same time, the parties reiterated that a free flow of information must be secured⁴⁴). A free flow of information contributes to the development of the Internet thanks to Web's decentralised nature⁴⁵ at least for two reasons. First, it is openness of the web to new devices, applications and services that spurs innovations.⁴⁶ Second, while a general convergence must be maintained, certain divergences increase system's immunity.

In order to realise the Internet freedom and openness some "auxiliary principles" were adopted. For instance, the states agreed on the necessity of ITC investments, particularly for broadband connections.⁴⁷ Here again free competition shall yield better results in terms of an access price and a territorial scope than a state-operated system.

With respect to the second assumption, the inclusiveness of Internet governance is mentioned already among OECD "pillar principles" (stipulated in the 5th).⁴⁸ While the innovation potential can be fully tapped thanks to decentralisation and openness, upon technical convergence, the latter may be achieved through a voluntarily self-regulation, which may occur if participants are convinced that their justified interests are adequately recognised or at least that they have an opportunity to explain one's views. If desirable, respect of such voluntary codes of conduct may be subsequently supported by state authority. According to OECD's 8th principle, the Internet openness to innovation and self-regulation shall come together with participants' accountability for their conduct.

As far as the third assumption is concerned, public responsibilities of Internet users are first mentioned in the OECD document in the context of the multi-stakeholder process (Principle 5). Several issues are considered in detail.

In view of the risks stemming from the Internet openness, the principles stipulate that governments, private-sector, the Internet technical community and civil society shall cooperate to ensure individual control over the receipt of information and disclosure of personal data. Internet users shall recognise their co-responsibility in this respect.⁴⁹

⁴² UNESCO, *op. cit.*, Principles 4 and 11.

⁴³ The Council of Europe calls openness of the Internet and its interoperability as the "Architectural principles", The Council of Europe, *op. cit.*, Principle 8. UNESCO, *op. cit.*, Principle 5.

⁴⁴ Obviously, this raises concerns about state intervention in the users privacy zone; the freedom from invigilance is stipulated in UNESCO, *op. cit.*, Principles 7 and 17.

⁴⁵ The Council of Europe, *op. cit.*, Principle 7, *Decentralised management*.

⁴⁶ The Council of Europe, *op. cit.*, Principles 4 and 8; UNESCO, *op. cit.*, Principles 2, 15.

⁴⁷ UNESCO stressed the importance of the Internet accessibility for the social cohesion, UNESCO, *op. cit.*, Principle 3.

⁴⁸ The Council of Europe, *op. cit.*, Principle 2; UNESCO, *op. cit.*, Principle 1.

⁴⁹ The Council of Europe, *op. cit.*, Principle 6; UNESCO, *op. cit.*, Principles 8, 12–14.

Because innovation constitutes the core of the Internet economy, the free flow of information, research, innovation, entrepreneurship and the open access to public sector information⁵⁰ shall be supported not only by governments, but also by research institutions and other stakeholders. The delicate issue of Internet intermediaries' liability was also mentioned. Finally, in this environment open to worldview plurality, OCED called upon the civil society to contribute towards respects of law and protection fundamental rights.⁵¹

6. Conclusions

By lowering an access price, providing a new quality of direct connections and by marginalising geographical obstacles in everyday life, the Internet transformed the social life. Using economic opportunities thus created allowed financing further ICT development. As the Internet progress and financial profits became mutually reinforcing, a new Internet economy started to emerge.

At its origins the Internet was organised in a liberal, decentralised manner, based on self-regulation. Although this approach entails risks in terms of privacy, security or respect of fundamental rights, flexibility that it offers compensates states' incapacity to regulate the Internet through a traditional command and control chain.

Although it is difficult to indicate single breaking-points in the Internet history, it is clear that certain elements of its original architecture (including IP numbers or DNS) are on the brink of exhaustion. Given that the US, the only country that could attempt to exercise supervision of the Web alone, wholeheartedly supports the idea of self-regulation, decentralisation and openness, the process will be still managed by the Internet community itself. This is already reflected by the increasing mulilateralisation of Internet governance. Management of this dynamic system finds itself at a strategic crossroads.

All parties concerned, including states, have an interest in certain areas and thus shall be interested in contributing towards modes of governance.⁵² The only way to do so is to achieve credibility within the Internet community.

Given the common concerns about the Internet freedom (at least in Western states), governments are unlikely to achieve this by themselves. It lies therefore

⁵⁰ UNESCO, *op. cit.*, Principle 9.

⁵¹ Both the Council of Europe and UNESCO insist on the multicultural aspects of the Internet, The Council of Europe, *op. cit.*, Principles 1, 10; UNESCO, *op. cit.*, Principles 2 and 6.

⁵² Note for instance Japanese involvement in this matter within the US–Japan Policy Cooperation Dialogue on the Internet Economy, which supported the governance principals and called for better policies coordination. On 22 and 23 March 2012, the third Director General-level meeting was held in Tokyo. The summit included a “US–Japan Business Dialogue on the Internet Economy”, which addressed issues such as: coordination of Internet policy, cloud computing, cyber security, promotion of ICT in the public sector, disaster responses, IPv6, and research, training, and digital literacy (Department of State (US), *Media Note*, 23 March 2012, <http://1.usa.gov/JmED3r> (accessed: 19.04.2012).

in the interest of each state to promote development of civil society and adequate human resources in the field of ITC. This will not occur in a centrally-managed system (both due to innovation potential of such a model and as a result of credibility problem within the community).

Governments inclined towards a rigid control over public expression apprehend consequences of Internet freedom. However, as guides on circumvention of the Internet censorship are easy to find and understand,⁵³ efficiency of such measures in technically-sophisticated states appears illusory. Accordingly, such policies may be counter-productive. Having prevented own citizens from participation in Internet governance, the government not only lets the others decide, but also by causing domestic outrage it creates tensions in relations with the IT elites. Instead of a rapid economic development thanks to ITC technologies, the most Internet-proficient user launches a crusade against its own state.

Also apart from Internet governance *per se*, the economic importance of the Web is continuously growing. Since the deterioration of the global financial and economic crisis in 2008 relative weights of states participating in the international economic governance have changed.⁵⁴ Since new economic powers advocate co-shaping of the global economic governance agenda, a voluntary self-exclusion in the e-field would be inconsistent with such aspirations and economically unfavourable (given the example of agricultural talks,⁵⁵ one can easily imagine how freedom-reticent regimes move the focus of talks towards the Internet-trade, gaining political capital worldwide).

Asian countries shall use accessibility of the ITC hardware to transform their economies from manufacturing towards knowledge- (Internet-) based. Tapping the potential of the most IT advanced Asian states, neighbouring with the most underdeveloped, provides a considerable potential to those ends. To do so, a considerable human capital gap shall be bridged and the only rapid path leads through self-education, cooperation and exchange of experiences between users. Arguably there are no palliatives. Either states embark on the way of the ITC way or abandon it altogether. Mid-solutions may prove self-destructive or at least not worth the risk that they entail.

⁵³ Freedom House, *Leaping Over the Firewall: A Review of Censorship Circumvention Tools*, 2011; J. McKellogg, Freedom house: Internet censorship circumvention tools effective, lack security, *Voice of America*, 15 April 2011, <http://bit.ly/HTy9pT> (accessed: 19.04.2012); L. McManus, Options for companies dealing with Internet censorship abroad, *Yale Law & Technology*, 23 October 2011.

⁵⁴ M. Menkes, IMF's governance reform in the shadow of current-accounts balance debate, *PISM Bulletin* 2010, No. 131 (207); M. Menkes, G20 Cannes summit: Crisis governance under evolving circumstances, *PISM Bulletin* 2011, No. 100 (317).

⁵⁵ M. Menkes, *The G-20 Agriculture Talks Trap*, "The Great Indian Dream", September 2011.

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ZASADY ZARZĄDZANIA INTERNETEM. WZROST GOSPODARCZY I INNOWACJE W AZJI

Streszczenie: Upowszechnienie się Internetu przyczyniło się do istotnego wzrostu znaczenia wiedzy w procesie gospodarowania. Od początku Internetem zarządzano zgodnie z liberalnymi założeniami, bazującymi na auto-regulacji, co nie odpowiadało części państw azjatyckich, niechętnych koncepcji społeczeństwa obywatelskiego. Pewne elementy oryginalnej architektury internetowej z przyczyn technicznych niebawem ulegną wyczerpaniu, co czyni koniecznym osiągnięcie globalnego porozumienia w sprawie jego dalszych losów. Zarządzanie siecią pozostanie zdecentralizowane, a gospodarcza jej doniosłość jest zbyt wielka, aby dobrowolnie zdecydować się na samowykluczenie z procesów decyzyjnych. Albo zatem państwa azjatyckie zrozumieją, że jedynym sposobem uczestniczenia w zarządzaniu Internetem jest zezwolenie na swobodę internetową, co umożliwi pośrednie oddziaływanie na zakres prowadzonych rozmów, albo też zostaną zmuszone do akceptacji rozwiązań wypracowanych w państwach, których gospodarcze znaczenie pod innymi względami istotnie w ostatnich latach zmalało.

Słowa kluczowe: governance gospodarczy, Internet, Azja.