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## **EUROPEAN QUARTET OF MISSED OPPORTUNITIES FOR INTERNET GOVERNANCE**

### **Abstract:**

Who controls the Internet? Conventionally, it is assumed that the hegemony, if not monopoly, of the U.S. Government over the Internet governance is a fait accompli generated by the historic evolution, as well as the economic and political power which the USA asserted in an almost aggressive manner. This assumption is the result of a set of myths and misinformation and deserves to be corrected while presenting both American and European perspectives, in the context of the real managerial and technical setting. This black-and-white perception is to be rejected and replaced by a colorful mosaic showing that a set of misunderstandings and aborted opportunities shaped the pathway to the status quo. An active and strong impact over the Internet governance was several times close to European hands, and it is highly instructive to analyze these situations where Europeans did not manage to get involved in the top Internet management. Four decades, four sets of opportunities and four failures for many business management and other reasons are detailed. Considering the global situation, Europeans cannot afford repeating such mistakes. Taking into account the current stage of the relationship between the EU and USA, especially Transatlantic Trade and Investment Partnership, a consensus, or at least a respected tolerance, of the management of the Internet and governance over it is critical.

### **Keywords:**

EU, DNS, Governance, ICANN, Internet.

**JEL Classification:** H73, K00, M15

## 1 What is the Internet

One set of hallmarks of the post-modern global society is information systems with information technologies („IS/IT“), information communication technologies (“ICT”) and their accelerated technological development, which changes global and local structures. The linkage of the competitive advantage to new technologies, technological skills and capabilities makes the awareness and education in this field absolutely essential (Tervonen, 2015). Boldly, ISIT, ICT and innovations in general nowadays belong to the most important factors of a modern competitive position (Ostraszewska, 2015).

Another set of these hallmarks is re-occurring real or alleged crises, and the tension between integration and (dis)integration, centralization and decentralization. There is a myriad of long and short term causes for it (MacGregor 2014a), there is no consensus about the potential methods and forms of their solution, and one of the few certainties is the need to place an even greater emphasis upon the appropriate use of the Internet (MacGregor, 2012a). Clearly, in this universal complexity there remain constants, desirable venues with which to successfully develop a healthy competitive environment, such as a suitable understanding and employment of the Internet (MacGregor, 2013).

The Internet, as the e-medium and platform *par excellence*, is a virtual network of networks, allowing packet based standardized communication and information exchange. This impressive phenomenon is a global system built up by and in between nodes, such as computers and other network devices, and their networks, which communicate based upon relevant protocols - Transmission Control Protocol (“TCP”) and Internet Protocol (“IP”) (MacGregor, 2012b). Hence, the Internet is a global Meta-Net consisting of many nets, and built basically by two types of elements – the net communication capable devices and the data communication lines, such as cables or fibers (Cichon, 2000). These nodes are server computers for hosting Websites, plain personal computers, or other IT devices able to access the Internet and communicate, and even Internet sites such as Websites. Each node has a unique numeric code address determined by protocols - Transmission Control Protocol (“TCP”) an Internet Protocol (“IP”), i.e. TCP/IP. Thus these nodes and their networks communicate based upon relevant protocols, i.e. TCP/IP protocol (MacGregor, 2014a).

Along with the mentioned “tangible” structure of the Internet, there is a parallel “intangible” structure of the Internet, which consists of Top level domains (“TLDs”), each composed of sub-domains attached to hosts carrying a code address (IP numeric address) which is, for convenience, converted through the Domain Name System (“DNS”), i.e. the DNS database placed on special name computer servers, into a verbal (literal) form – a domain name (MacGregor, 2014a). The DNS is an essential system for the Internet, and its design and administration evolved along with the development of the Internet (Pope, 2012). The heart and cornerstone of the Internet are Rootservers, which guarantee the decentralization and functionality of the tree structure of the DNS (Eberwein, 2012).

Functionally, the Internet has a number of functions - to communicate, to inform, to do business, to entertain, etc. (Köhler, 2011) and its key services include the www system, the DNS, e-mail correspondence, online communication, file sharing, social nets services, etc (MacGregor, 2014a). However, originally, it looked much modest ...

The history leading up to the Internet started six decades ago with the introduction of the electronic personal computer ("PC"), which opened the evolution gateway toward the current Internet (MacGregor, 2014a). In 1966, the U.S. Advanced Research Projects Agency ("ARPA"), as a sub-section of the U.S. Department of Defense ("DoD"), installed a decentralized net composed of 17 PCs and called ARPANet, which later on became the first network implementing standard protocol communication – TCP/IP (MacGregor, 2014a). In 1969, the unofficial operation of the ARPANet, financed by the DoD, started as the first Interface Message Processor ("IMP") and was installed at the University of California, Los Angeles ("UCLA"), followed by three other colleges - the Stanford Research Institute, the University of California, Santa Barbara ("UCSB"), and the University of Utah. The first ARPANet communication occurred between UCLA's team of Jonathan Postel and Vinton Cerf and the Stanford Research Institute (MacGregor, 2014a). Further, Jonathan Postel started his editing activity called the Request for Comments ("RFC") series under the auspices of the Internet Engineering Task Force ("IETF") and the Internet Society ("IS").

However, the USA had neither a monopoly nor an exclusivity nor tremendous advantages regarding networks operating based on standardization and packet transfers. It would be remiss not to mention French Cyclades and other prophetic, often genial, projects emerging in this era. Sadly for them, even the best ideas about Internet precursors needed not only intangible efforts of wonderful experts and innovators, but as well very tangible efforts regarding material resources, namely money and computers. This was provided by the US government but not by European states to their own experts. In addition, the common law and pioneering attitude in the US along with the famous drive to "go for it and try it", even if the result is not certain meant another tremendous push. As well, it is important to underline that the US government supported the evolution towards the Internet before as well as after the start of the private use of the Internet, especially for commercial purposes. Last, but not least, when various European e-networks projects ended, the jobless scientists were welcome in the USA, where they continued their work, but naturally for the US networks. Louis Pouzin from France helped so much with the ARPANet, that Vinton Cerf from UCLA thanked him very deeply for it (Mauriac, 1998). Similar feelings could be expressed by American Microsystems, which was able to hire on Pouzin's team members, Michel Gen and Hubert Zimmermann (Mauriac, 1998). For Americans, the goal of action was to work together and connect networks while engaging all the "brains", for Europeans the goal of action was to preselect and protect one project while avoiding connections and communications with others ... well, this can be called the mortal sin in the (to be) Internet setting.

The U.S. government has never succumbed to the temptation to politically select the "right" network and kept following the co-operative win-win sharing approach, instead of supporting a fight with an illusory goal of letting the 'best' one win and to hell with the rest. Hence ARPANet and other American networks kept developing in parallel with the purpose to be compatible, to be inter-linked, i.e. to reach *internetworking*, as firstly described in 1974 in the Request for Comments No. 675, i.e. RFC 675 about the Internet Transmission Control Program. The *internet* was understood as any network using TCP/IP, and when in the late 1980s ARPANet and NSFNet were linked, the term *Internet* started to be used as a name for such a large and global TCP/IP network. Another US network created and conec

In 1979, various USA Universities and Colleges, especially the University of North Carolina and Duke University, addressed the emerging need through the creation of their own network, USENet (User Network) which still operates today (Naumann, 2001). Thus, the USENet started its operation one decade before any general access to the Internet was given to the public-at-large, and the launching of the World Wide Web (MacGregor, 2014a) and the move to TCP/IP translated in a dramatic increase of the population of networks (Pope, 2012).

On 1<sup>st</sup> January 1983, ARPANet started to use TCP/IP, and so officially the Internet was born (Köhler, 2011), i.e. all networks with hosts using TCP/IP were *Internet* and while others, following other protocols, were mere *internets*. At the same time, ARPANet split and one part became the MILNet, designed for military purposes and for unclassified DoD communication (Muth, 2000), and the other part was left to private use, and especially the universities and colleges already using CSNet seized this opportunity (Naumann, 2001). The split was rather even, the 113 nodes of ARPANet were divided more or less into two halves, since 45 nodes went to the MILNet and 68 nodes remained in the reduced version of the ARPANet (MacGregor, 2014a).

in 1984, the increase in the number of nodes and attached network devices and the operation of parallel networks made it virtually impossible to keep track by using some excel spread sheets to identify and match IP addresses, and a new system was introduced, the Domain Name System („DNS“). Thus, since 1984, the communication between computers, sites and networks is facilitated by a system of special computers proceeding according to set rules, and converting a unique numeric code address into a unique verbal address and vice versa - the DNS (MacGregor, 2012b).

In 1986, the National Science Foundation (“NSF”) used its experience with CSNet to create a backbone net called NSFNet and to use for it TCP/IP. The NSFNet supported supercomputing centers and regional research and education networks in the USA. Since many users of NSFNet did not have super computers, the NSFNet became overloaded (MacGregor, 2014a). The necessary network upgrade occurred in 1988 based on a cooperative agreement with the MERIT Network in partnership with IBM, MCI, and the State of Michigan.

In 1989, the Internet reached the public as well as the private sphere, including households (Naumann, 2001) and this facilitated the start of the robust commercial use of the Internet in 1989 (Muth, 2000).

In 1990, the successful operation of the NSFNet and the creation of the Federal Internet Exchange made the ARPANet and CSNet redundant and they were de-installed (Köhler, 2011). In 1995, even the NSFNet was replaced by backbones operated by several commercial Internet Service Providers (“ISP”). Consequently, the U.S. Federal Networking Council passed the definition of the Internet as the global information system logically linking, using TCP/IP, etc. (MacGregor, 2014a).

In 1992, *Conseil Européen pour la Recherche Nucleaire* (“CERN”) in Switzerland developed the feature of interlinked hypertext documents that are accessed via the Internet and built on top of the DNS - Wide Web (“www”). The www is a critically important part of the Internet, which allows the public-at-large to get access to the text, audio and even video documents and information saved on various servers while using

the program language Hyper Text Markup Language (“HTML”), Javascripts, and other instruments able to interpret Websites (Naumann, 2001). Hence, the information on the Website is not sent to others, instead it is posted on a server and interested third parties can reach it through a fixed Internet Address called a Uniform Resource Locator (“URL”) and see it on their devices (Muth, 2000). This helped to make the use of the Internet more popular and business worthy, and thus the Internet could cross the Rubicon and change its nature, an academic research network became a commercial network (Lindsay, 2007).

In 1995, IANA and the Internet Society (“ISOC”) were rethinking the DNS in order to abolish the distribution and registration monopoly of the Network Solution Inc., an engineering and management consulting firm with headquarters in Herdon, Virginia (“NSI”), and to create a more effective and efficient dispute settlement mechanism (Köhler, 2011). In 1995, the Internet became a truly commercial public medium, as the popularization of the www application facilitated the explosion of consumer and business interest in the Internet (Mueller, 2000) and the imposition of registration and renewal fees on domain names from 1995 turned NSI into a fast, easy and stable cash cow with a very low legitimacy for such an operation. This generated strong criticism, calls for “free” and neutral Internet, and led to the emergence of ICANN and to the rewording and reinforcing of the modern definition of the Internet.

Nowadays, the Internet is defined as technically as the global data communication capability realized by the interconnection of public and private telecommunications networks using TCP/IP and other protocols required to implement IP inter-networking on a global scale, such as the DNS and packet routing protocols (Mansell, 2013). The Internet is neither unified nor centralized nor operated by one subject which would be responsible for it (Cichon, 2000), instead the Internet is a free and private autonomous assembly of nets and their operators, using the same “protocol language”, and thus occasionally the Internet is described as a modern-day form of anarchy consisting of heterogeneous blocks linked in an alternative manner. It is even suggested that it is a chaotic communications system, due to the fact that it operates without a central hierarchic administration and management structure (Muth, 2000). Nevertheless, the lack of centralization does not exclude the obvious postulate that the Internet has a solid governance and management, which are not conventional, but they still exist and operate relatively successfully. They include, along with the already mentioned decentralization and communication compatibility, as well the multi-stake holder model, etc. and they are the outcome of a more than one half century long spontaneous and rather unique evolution leading to the current *prima facie* obscure, although explainable, Internet governance.

## **2 What is the Internet governance?**

The understanding of the Internet governance requires one to clearly set the meaning of the term governance as such. Thus, it is essential to underline that governance is the means by which actors or elements are limited, directed and managed, and it can range from mandatory law provisions to ethical standards or self-chosen disciplines (Mansell, 2013).

Hence, the Internet governance means the development and application of shared rules, principles, standards and procedures, which makes the Internet structure work and evolve, and since the Internet is a network of interconnected autonomous networks, there is no one single authoritative Internet governor. Instead the governance is conducted based on decentralization and a multi-stakeholder model. However, considering the competency and responsibility, along with the structure, operation and multi-functional use of the Internet, the issue of Internet governance is dramatically important and it would be foolish to perceive it as something insignificant or inherently exogenous.

A deeper understanding of the Internet governance, especially its current stage, requires one to keep in mind the above described evolution towards, and of, the Internet, the definition of the Internet and various attitudes and (lack of) support regarding the Internet. It cannot be overstressed that the Internet was originally a US network definitely not conceived for a massive business use, and that the legitimacy of its framework was definitely at the center of attention (Matejka, 2013). In other words, the current Internet governance has roots in the management manner of various networks in the USA, which emerged several decades ago based on private initiatives vehemently supported by the US government and financed from public funds. Logically, the Internet was built and developed based on the US business management models fully recognizing pragmatism, a can-do attitude and a “learn-on-job” style (Kaplan, 2014) along with the typical common law preferences for business dealings and searching for win-win solutions. Hence, the Internet is an outcome of the common law for which are more suitable common law governance models than continental law models. Internet is definitely not an outcome of the public law sector activity in a continental law environment and the French perception of the Internet governance as a state-led mechanism, as presented in 2011 during e-G8 summit (Mansell, 2013) appears inappropriate. Sarcastically, it could be said, that French eagerness to decide on the state level what is the best for the Internet will continue until they successfully manage to destroy the Internet.

### **3 Who has the competency and legitimacy for the Internet governance?**

The economic revitalization of post-war Europe was due not only to US financial support programs but was well due to management techniques (Kieser, 2004), including the advancement of the practically-oriented US business school model (Locke, 1989). The practical and pragmatism approach with the state endorsement brought sweet fruits, as can be demonstrated on the German wonder (Kaplan, 2014), and the abandonment of such an approach was after several seasons with bitter fruits put under scrutiny (Mansell, 2013) and the return to the abandoned happened. This can be used as a parable for the assignment of the competency for the Internet governance and the decision about its legitimacy. Nevertheless, the ongoing drive and willingness of certain states and groups, even individuals, to usurp the competency, preferably the exclusive competency, for the Internet governance are *omnipresent*, and various justifications for them are presented on an ongoing basis. The New Testament's *Multi sunt vocati pauci vero electi* from Matthew 22:14, i.e. many are called but few are chosen. This can be paraphrased regarding the Internet governance that many feel called to have the competency for the Internet governance and do whatsoever to become the only chosen, while using any and all arguments and justifications for their (alleged) legitimacy.

It is highly instructive to overview some subjects from this list of the “many are called”, which feels that they have or should have the competency for the Internet governance and eagerly providing their reasons. Naturally, the hottest candidates are the US government and ICANN. Nevertheless, it is essential to mention as well other candidates, and their overview can start by recalling the events two decades ago, even before the creation of ICANN.

In 1992, Swiss CERN brought the www feature to the Internet and this might be perceived as a legitimacy for a certain competency, perhaps a part on the Internet governance. For various reasons, CERN did not go for it. However, its www invention made the Internet of Websites and URLs (Muth, 2000) a platform with an exponential growing attractiveness for the public at large. The business nature of the Internet became manifest (Lindsay, 2007) and a true war over the Internet governance began.

In 1995, IANA and the Internet Society (“ISOC”) reacted on the described commercialization trend and have been rethinking the DNS in order to abolish the distribution and registration monopoly of the Network Solution Inc., an engineering and management consulting firm with headquarters in Herdon, Virginia (“NSI”). The NSI become competent because based on various contracts it was empowered to manage the distribution of domain names from lucrative TLDs, as well as be involved in key servers management. The only legitimacy of NSI steamed out of these contracts and thus vis-à-vis the general public, especially in the global context, such a legitimacy was extremely weak and perceived rather as a *de facto* than *ex lege* or the best ethical choice. The NSI was clearly between rock and hard place, under the fire blowing from IANA, ISOC, etc. on one hand and under the fire from various interest groups, such as *omnipotent* and *omnipresent* trademark owners associations. In addition, states did not need to stay behind. In this situation, NSI did an extremely smart move and decided to avoid battle and create a win-win situation. Namely, NSI promised to give away some of its competencies ... later one really gave certain of them away, while maintain the most important, at least financially, the management of the TLD .com. After the merger ...

However, it would be inherently wrong to perceive NSI as the losing party, or more appropriately as holding the losing cards. In the aftermath of the successful ICANN power battle over the Internet governance, NSI was sold in 2000 to another USA corporation, VeriSign Inc, based in Reston, Virginia. VeriSign Inc. was founded in 1995 as a spin-off of the RSA Security certification services business and, from 2000 until today, it is the Registry operator of the most attractive and lucrative top level domain, TLD .com, along with TLD .net and TLD .name. In addition, VeriSign Inc. operates two of the Internet’s thirteen root name servers. VeriSign can easily stay in black accounting numbers and the math operations cover not only plain registration and renewal fee evaluations but as well the estimation of the value, price and fair market value of domain names based on qualitative point method in interaction with market and income generating potential approach (Veleba, 2015). Last, but not least, VeriSign Inc. has over 1000 employees and its stock VRSN is traded over USD 60 in Nasdaq while the share volume is almost 1 000 000. Well, this is called win-win and Europeans can take a lesson from American know-how to deal with private initiative with overlapping effect in the public sphere – the key approach should be legislative self-regulation and not government selective biased interference!

In sum, NSI has stronger competency than legitimacy...

In 1996, it came a moment of the glory for another subject from the list of “many called” the International ad hoc Committee (“IAHC”) which was created as an international reaction on tensions surrounding among else the (doubtful) competency and (alleged) legitimacy of NSI (Kruger, 2014). Namely, IANA, ISOC, Internet Architecture Board (“IAB”), Federal Networking Council (“FNC”), the World Intellectual Property Organization (“WIPO”), the International Trademark Organization (“INTA”) and the International Telecommunication Union (“ITU”) established IAHC as an international multi-organization for specifying and implementing policies and procedures relating to gTLDs, influencing the contractual registry-registrar model and a policy for resolution of TM related domain name disputes (“UDRP”) which both are employed by ICANN until today. IAHC definitely wanted to influence the distribution and execution of competencies and probably felt ready even to assign or assume some of them. Well IAHC reference to the multi-spectral support as a source for a global legitimacy did not prevail and the IAHC itself within one year perished to just partially continued as the Internet Council of Registrars (“CORE”). The evaluation power formula for IAHC is opposite to the NSI formula, IAHC had more legitimacy than it competency.

In 1998, emerged an interesting duo working against each another as well as along each another and this duo considered combined has probably more power and legitimacy than any other subjects, except the US government. This victorious duo includes ICANN and its Governmental Advisory Committee (“GAC”).

In 1997, CORE presented its first Final Report about a new international system for the management of the DNS, about the introduction of new gTLDs and about the transfer of the distribution of domain names to private organizations (MacGregor, 2014a). Accordingly, the agreements with NSI and IANA regarding the administration of the DNS were terminated in 1998 (Köhler, 2011). A ‘big noise’ from many angles called for privatization and the de-Americanization of the Internet ... and then it was created the Internet Corporation for Assigned Names and Numbers (“ICANN”) as a private organization with a seat in Marina del Rey, California and entrusted with the task to represent the international community, to coordinate the Internet technical protocol and to supervise the administration of Internet Addresses and names (MacGregor, 2014a). ICANN was and still is a legal entity from the private law sphere, a nonprofit California-based § 501(c)(3) corporation and there is not the smallest doubt that the U.S. government was deeply involved in its formation and even thereafter in its operation (Weinberg, 2011).

Thus the competencies of NSI and IANA were transferred to ICANN operating based on the multi-stakeholder model. Until today, ICANN is the coordinator for the IP Address-systems, monitors the DNS and decides about the launching of any new TLD, develops new standards for Internet protocol and ICANN organizes the Root-Server-Systems (Köhler, 2011).

In reality, especially at the outset, ICANN was highly dependent on the U.S. government and it was only due to the U.S. government support that it managed its power-battle with profit chasing NSI, which was determined that it owned TLD .com, TLD .net and TLD .org



registration databases and perhaps even these lucrative gTLDs as such. Well, after the expiration of a five year cooperative agreement between NSI and NSF, there appeared shadows on the sunny days of NSI ... and the U.S. government won that round ... and many other rounds in the eternal fight over the Internet governance. Very significantly, the U.S. government has retained a veto over any ICANN action pertaining to the contents of the root zone (Weinberg, 2011).

States exercise their influence on ICANN through the GAC, and it is important to mention that GAC did not play a critical role in ICANN's early years and no more than thirty national governments, all from developed countries, participated in it (Weinberg, 2011). Similarly, in ICANN's early years, still many national governments perceived their ccTLDs as their true kingdom.

However, it would be superficial to speak about EU and European attitude about the Internet governance in the second decade of the 21<sup>st</sup> century in general. It would be even wrong. For example, French President Nicolas Sarkozy, rather a right conservative, argued for tougher Internet regulation at e-G8 summit in 2011 and clashed with supporters of open Internet, such as the UK representatives not desiring intrusive state-led actions and regulations with respect to the Internet (Mansell, 2013). It seems that France, regardless whether leftists or rightist, persistently declines the *status quo* and has dramatically different vision about the Internet governance than at least several other EU member states, and hopefully as well the EU as such.

Nobody can deny that international organizations representing the interest of trademark owners made significant efforts and managed at least to change certain DNS policies, and during the second half of the 1990's fought for their members and their interests. Such an eagerness and determination was not made by the representation of the European Community ("EC") and the freshly created European Union ("EU"). As a matter of fact, the EC and EU did not seem to put the Internet governance on the list of their priorities. In addition, even European states did not appear to be interested, and this despite important contributions of their individuals and entities to the development of the Internet and despite European trademark owners. Actually, they got the message and relied rather on international organization instead of their own national governments. In brief, the door was open for non-Americans to get involved in the Internet governance business, but the EC and EU did not show any genuine interest in this respect.

#### **4 The future of Internet governance – new generation perspective**

At the start of this millennium, ICANN representatives needed stronger and heterogeneous support and wanted to get national governments on their side and open the discussion about the private law nature of the ICANN. National governments were not enthusiastic about it, the European Commission confirmed the EU's traditional support of the principle of private sector self-regulation and the USA was concerned about the reduction of democracy, transparency and accountability on the side of the ICANN (Weinberg, 2011). Thus, it looks *prima facie* like a conceptual American and European consensus about the self-regulatory ICANN operation.

The common law independency, responsibility and business pragmatism prevails. In Europe, the public sector assist the private sector in self-regulation. The continental law paternalistic approach does not allow a mere tossing of a job on private subjects. For

Americans, Europe's governments and public sector keeps mixing and intervening into a private sector supposed to go ahead with self-regulation. For Europeans, Americans demonstrate a naive faith in industries to do a great self-regulatory job without public guidance (Newman, 2004). Thus the self-regulation requested by the European Commission according to continental law standards did not mean to leave ICANN on its own, but probably was understood, as such, on the other side of the Atlantic. Regardless if this is labeled culture difference, miscommunication or misunderstanding, this should not have happened and the European Commission should have chosen a different reaction in 2002.

Traditionally, the most vigorous participation in the GAC has the USA. In addition, the U.S. Department of Commerce ("DoC") kept, through a set of agreements, control over the Root-Server A. In 2009 these agreements expired and were substituted by the Affirmation of Commitments signed by the DoC and ICANN. Instead of control by the DoC, only representatives of governments via GAC and partially interested groups and external experts effectively can sanction how ICANN satisfies its tasks. However, now as before, the US government has the strongest leverage to call for the entering into the agreement about the administration of the central Root-Zone (IANA-agreement) easily, and through this could ICANN, by the expiration of the notice period of 120 days, lose the technical control over the Root-Server (Köhler, 2011). Thus ICANN is governed by the US law and de facto leaves the ultimate top administration of the Internet structure to the USA. This *status quo* is subject to a strong criticism and the question of legitimacy is *omnipresent*. (MacGregor, 2014a).

Still today, ICANN sets the rules for the Internet addressing systems making possible email communication as well as for creating, downloading and seeing webpages and even for DNS (Weinberg, 2011). The U.S. government was very visibly involved in the ICANN formation and operation during the first years of its operation, but thereafter started a trend to move away from a direct exclusive impact towards an indirect shared impact, while emphasizing the famous multi-stakeholder approach and underlining the complex representation and decision-making structure of ICANN. During the last five years, the U.S. government has channeled the critical bulk of its interaction with ICANN into a multilateral forum strongly influencing, if not governing, ICANN and thus Internet – the above mentioned GAC.

It has been always the case at ICANN that pressure by those with influence and power gets results, and that ultimately the employed mode is a bargaining model of governance (Weinberg, 2011). And as with all sizable organizations, there have always been proponents and opponents and ICANN with its policies and decisions is not an exception and as of 2011 legislative action in several countries has indicated that not only Internet, but even DNS, may encounter influence by governments as a method of filtering out undesirable Internet sites and even for other reasons (Pope, 2012). In addition, it should be pointed out the dynamics of the new involvement of the generation Y, which exhibits an increased drive for open communication and readiness get actively involved (Lewis, 2015), especially if in the multi-stakeholder setting typically for ICANN. The evolution of the Internet governance has been always strongly shaped by individuals, perhaps much more than states and institutions. The second and third decade of the 21<sup>st</sup> century belongs (at least partially) to the Y generation and whether more ICANN, GAC, DoC, EU

or somebody else will control the Internet structure, such as DNS, may depend upon the openness of each of these entities to effectively and efficiently work with and use the potential of new generations.

The 21<sup>st</sup> society is a global information society where the competitive advantage can be achieved only if relevant and correct information is processed. The statistical data and already presented studies and papers makes it clear that over half of domain names are not really used and over 90% cannot be sold for more than nominal registration charges [6]. At the same time, the most desirable TLD for business conduct is TLD .com, and numerous domain names from TLD .com have sold for over 1 000 000 USD. It is thus interesting that Czech professionals with an enhanced knowledge about intellectual property fully recognize the meaning of the domain and domain names and proclaim the importance of domain names, but have an extremely hard time to indicate their opinion about an ideal domain name for business. It is even more amazing that they fairly split between TLD.cz, TLD .eu and TLD .com. However the least logical finding is that one cannot reconcile their answers about the highest legal price for a domain name without any violation of bones mores.

Czech consumers' particularities have been already determined, i.e. Czech consumers massively shop on-line and almost all of them go after the lowest price to be found by search comparative engines, period [2]. Since more than 90% of Czech consumers buy the product with the lowest price indicated by the comparative search IT device, they are EU champions in this 'price-sensitive' respect [2].

The data collected from, and based on the questionnaires, their critical comparative analysis and the employment with the meta-analysis makes it clear that Czech intellectual property professionals understand the meaning of domain names and they share the view about their importance. At the same time, they do not recognize the reason for this importance and are hesitant to identify attractive domain names for business. Most interestingly, the homogenous group of Czech intellectual property specialists creating the poll of respondents generated totally random answers regarding the highest legally and morally acceptable price of a domain name. A dramatic asymmetry of information and a paralyzing effect of methodological confusion hinders sound opinion and educated decision formation. With a touch of exaggeration, it can be stated that domain names are assets for which as the maximal (!) price is indicated by some Czech intellectual property specialists as 10 USD, by others more than 1 000 000 USD. This asymmetry of information is alarming, since domains with appropriate domain names and attached Websites is a must for a sustainable and successful business in the second decade of 21<sup>st</sup> century. Czech businesses are aware about it, probably more based on their good intuition than an advice from experts, and over 80% of them have their own domain with Websites. However, their foreign competitors are likely to get a professional robust and well-informed assistance and thus their information systems based on their domain names are more effective and efficient and this ultimately translates into their competitive advantage. The Czech recognition of the importance of domain names without the capacity to select the optimal domain name for a particular business and to determine its price creates an ambiguity, if not chaos, and has serious negative consequences, especially for Czech businesses. An enhancement of awareness, identification of criteria, formulating calculation formula and transposition into practical life are essential for

sustainable and successful business development in the Czech Republic, especially with respect to small and medium size businesses. Czech consumers and businesses cannot afford to miss the domain name opportunity and they need top quality and up-to speed advice, such as the advice successfully provided to their foreign competitors.

## 5 Conclusion – Quo vadis ?

What should prevail? Form over content or content over form? Power *de iure* or *de facto*? *Status quo* or to be *status quo*? Natural law or positive law? Well, a good governance is effective and efficient, thus making operation of the Internet smooth, legitimate and acceptable. The governance method must reflect on what is to be governed. Internet is free, open, neutral, decentralized, virtual, modern, innovative. At the same, Internet is standardized and protocolized, established in a certain manner and there is strong resistency, if not impossibility, to dramatically reshape the Internet governance. Certainly, the Internet does not know state borders, but this does not imply in any manner that Internet is out of reach of law or that the Internet governance escaped principles for business management.

Internet was created by Americans more than by anyone else and Americans have always kept it to open to others, provided key common law features are observed. This does not look to change. As a matter of fact, the US Congress is closely monitoring it and is ready to step in if really necessary. Otherwise, the Internet is governed based on the multi-stakeholder ....

... Is structure-wise Internet properly and legitimately managed by ICANN impacted by the DoC and GAC without any strong EU impact? Sadly for Europeans the answer seems to be rather yes. In other words, Europeans committed a set of strategic, business management errors and the loss of active participation in the Internet governance seems a fitting price for that.

Americans and Europeans agree upon the responsible self-regulation of the Internet, but self-regulatory regimes look and mean something different on each side of the Atlantic. Legalistic self-regulation has already created market competition as well as cooperation among self-regulatory systems and various networks and technologies. Since the public sector in the USA appears better endowed with the stick capacity than with the carrot approach, the opposite is true for Europe and thus private subjects are left on their own and the U.S. government does not directly interfere but is indirectly around, in a very vigorous manner (Newman, 2004). The U.S. government does not direct the Internet but it definitely actively and strongly plays the first role in GAC, which has power over ICANN and ICANN itself has power over the Internet and IANA, while the Root zone servers are still under the control of the U.S. government. The Internet and its governance are well established in a common law self-regulatory manner while distinct self-regulatory trajectories in Europe and the U.S. are developed (Newman, 2004). Europe and the USA are already well on their way toward different regional based IS/IT strategies, and no dramatic abrupt changes in the Internet governance are to be expected in the near future. Is this fair and legitimate?

Rather yes than no. The precursor and forerunner networks of the Internet, as well as the Internet itself, were predominantly developed and launched by USA agencies and the universities and colleges in the USA and were almost completely financed directly or

indirectly from the U.S. federal budget, i.e. they were paid by U.S. taxpayers. The Americans attempt to co-operate and not selectively exclude, a priori, others, they opened the access to their nets to nets from Norway, Great Britain, Israel, Germany and, afterwards, other countries joined them and they took care of the backbone and managed to maintain a sustainable, effective and efficient operation (MacGregor, 2014a). The U.S. government monitored and stayed closely behind, but it did not get mixed in individual battles and setting issues.

Thus the U.S. government did not succumb to the temptation to use the Internet as a tool for political battles over the White house and the Internet and ICANN have been operating regardless whether Republicans or Democrats prevailed on the U.S. scenery. The GAC multistakeholder model is a pure version of a bargaining model, done under the auspices of the private corporation following the common law legalistic self-regulatory mechanism with a stick capacity and behind monitoring and indirect government impact. No French sad Cyclades stories... No German passive participation ... No European Commission's misunderstandings... Well, there were way too many mistakes on the European side, and Europeans can blame themselves that they missed wonderful opportunities ... or, better yet, Europeans should learn from the many mistakes. As a matter of fact, the story of the TLD .eu shows that the learning curve of the European commission has been increasing, and this is further stressed by the Europe 2020 with its flagship initiative including a Digital Single Market for Europe supported by 16 initiatives set by the European Commission. Boldly, innovativeness, awareness about IS/IT and their effective and efficient employment are important factors of pro-competitive development and not only economists but as well EU officials know it (Pawlas, 2014). However knowing does not mean automatically implementing. The cost-effectiveness analysis is important in strategic and decision making process regarding allocation of sources (Alemayehu, 2014) and it is a true challenge to proceed with it regarding IS/IT, especially when not only economic and technical aspects and values are involved, such as in the case of the Internet governance. Thus, the past failures can provide a precious insight and the lesson from them can be interpreted as a condemnation of shortsighted, ill-informed, self-indulging and self-gratifying attitude. The Internet governance cannot be artificially assigned, the only sustainable solution is to obtain a larger consensus and to involve others, including member of young generations, rather than chasing them away in order to keep warm beneficial place to recycled politicians or so called academic experts. They know about IS/IT definitely less than members of the generation Y and their patronizing attitude regarding the Internet governance lacks foundation. It has been already proven that that universalism and benevolence are linked to the recognition of the importance of cooperation and perhaps sustainability (Málovics, 2015) and it is twice true in the setting of networks of networks needed to be compatible and using the same protocol. In other words, the Internet is not about selective exclusion and knowing-better proclamation. After all, network neutrality has come to serve as an all-embracing term for policy matters relating to the Internet and matches with the architecture of the Internet (Mansell, 2013). In brief, the Internet is more about communication and inclusion than about dictating and excluding.

Work of the EU on the Internet governance is still to a considerable extent in its infancy going through typical infant diseases and evidence suggests that whilst the EU has promoted itself as a leader, its performance has pointed to real constraint in fulfilling such

a role. One of the key reasons for that was the uncoordinated multitude of positions and actions, which caused confusion and weakened the EU position and unfortunately the formal EU representation on the Internet governance and its vital influence on ICANN through GAC is far from being solidly established (Christou, 2013).

In addition, being innovative, open-minded and ready to get involved with the Internet governance do not have to involve considerable expenditure and often low costs along with ideas, ingenuity and improvisation can bring a great result (Ostraszewska, 2015). After all, Americans are not perfect either, and the self-contradictory attempt to privatize the DNS by the launching of ICANN along with the relationship to the U.S. government and other governments have always been fraught with hazard (Weinberg, 2011). Nevertheless, they have never ceased to support Internet related ideas and to keep the Internet open to newcomers. The U.S. governments, ICANN, GAC and many organizations and individuals currently involved in the Internet guidance are looking for responsible and educated allies sharing the same values and thus the same western civilization sharing Europeans should not sleep through this call, for their own sake.

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