



Who governs the internet?

Players and fields of action

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Preface

We are on a quest, driven by crucial issues and the questions they raise: *How should the internet be regulated in order to be an important component of a good society? And who should be responsible?*

This search for internet governance, i.e. the global regulation of the internet, is without end. In 2005, Jeanette Hofmann defined internet governance as an open, collective process of searching, “[...] which aims to fill a global regulatory lacuna in a way that is conceptually and institutionally legitimate” (Hofmann 2005). Ten years later, the search goes on. As Wolfgang Kleinwächter (2015) writes: “In the macrocosm of the internet, the question is how to expand the multistakeholder model in order to find practical solutions for the growing number of political, economic, social, cultural and legal problems relating to the internet.” And yet, this seemingly endless search is beneficial, since it is part of what characterizes a lively democratic process.

This publication recognizes the principle that “internet policy is social policy”. Accordingly, its core assumption is that internet governance concerns everybody. The stakes are high in today’s digital society. Equitable access to the internet; human and civil rights; the right to social, cultural, and economic participation; fair trade; and ensuring that the “net of nets” is working smoothly and securely at all times: all are topics that relate to internet governance.

With this publication, the Friedrich Ebert Foundation intends to highlight the issue of internet governance and to encourage engaged members of the civil society, politicians, scientists, and citizens to embark on and pursue the search for a model of internet governance that will work best for all.

Johanna Niesyto
FES Media Politics



Photo: Maxi Uellendahl

**How should the internet
be regulated in order to be an
important component of a good society?
And who should be responsible?**



The most important questions about internet governance at a glance

Today, we are all connected to the whole world via the click of a mouse. In nearly every area of our lives, we rely on the internet. However, alongside the countless advantages it offers, the internet creates almost as many challenges for society—in different ways and to different extents, depending on the country concerned. One thing, however, holds true everywhere: the internet does not evolve of its own accord, and it does not automatically provide a space for citizens to express themselves freely. In order for it to function properly in the technical sense, as well politically and socially, human intervention and direction is needed. The internet must be regulated, administrated, and governed.

The politics of internet regulation can be divided into different fields: infrastructure, development and foreign aid; security; human and civil rights; and legal developments. The relevant question here is how the different goals of internet regulation should be implemented: via agreements between states or in ways that include all stakeholders? Via binding treaties or loosely drafted cooperation?

In addition to these substantial questions, it is especially important to determine who is to be responsible for

the regulation of the internet. Should it be international organizations run by nations, or rather open forums that include members of society and economic actors? This publication sets out to give answers to these very important questions in parallel: who governs the internet, in what way, and with regard to which fields of action?

Access to the internet is a human right and must therefore be provided to all citizens equally. Similarly, everybody should have the opportunity to enjoy their human and civil rights on the internet. Furthermore, internet governance is not the exclusive province of rich nations: the voices of the countries of the global south must also be adequately heard in the forums in which internet regulation is to take place.

The evolution of the internet as a global communication space is a topic that concerns all human beings. Creating a close cooperation between all stakeholders therefore remains the long-term goal.

The crucial questions of internet governance are:

How can basic rights and liberties be guaranteed for everyone?

What should be the rules for global trade on the internet?

Who should be responsible for ensuring that the technical infrastructure of the internet functions properly at all times?



Internet regulation concerns us all!

Most of us can hardly imagine a life without the internet. Many people are more or less permanently “online”—we communicate with our friends and family, read news, listen to music or watch the latest episode of our favourite TV show. We shop on the internet and take care of administrative matters with just a few clicks. Often we no longer consciously think about being online or offline in our everyday lives.

Our actions on the internet are bound by rules. For example, we are not allowed to download copyrighted music, nor to insult other persons on the net. The laws we have to abide by originate from the German legislature or the institutions of the European Union. Therefore, the rules that apply to internet users in Germany do not necessarily apply to Brazilian citizens who access their content from Rio de Janeiro.

The internet is global, but its laws are divided along national borders. Different rules apply depending on where you go online, and the means of access or level of security when using the internet are by no means the same throughout the world. The situation on the internet reflects the political situation of the respective country. Civil rights enjoyed by citizens of the European Union online and offline, for example, may be unattainable for users in states with authoritarian regimes.

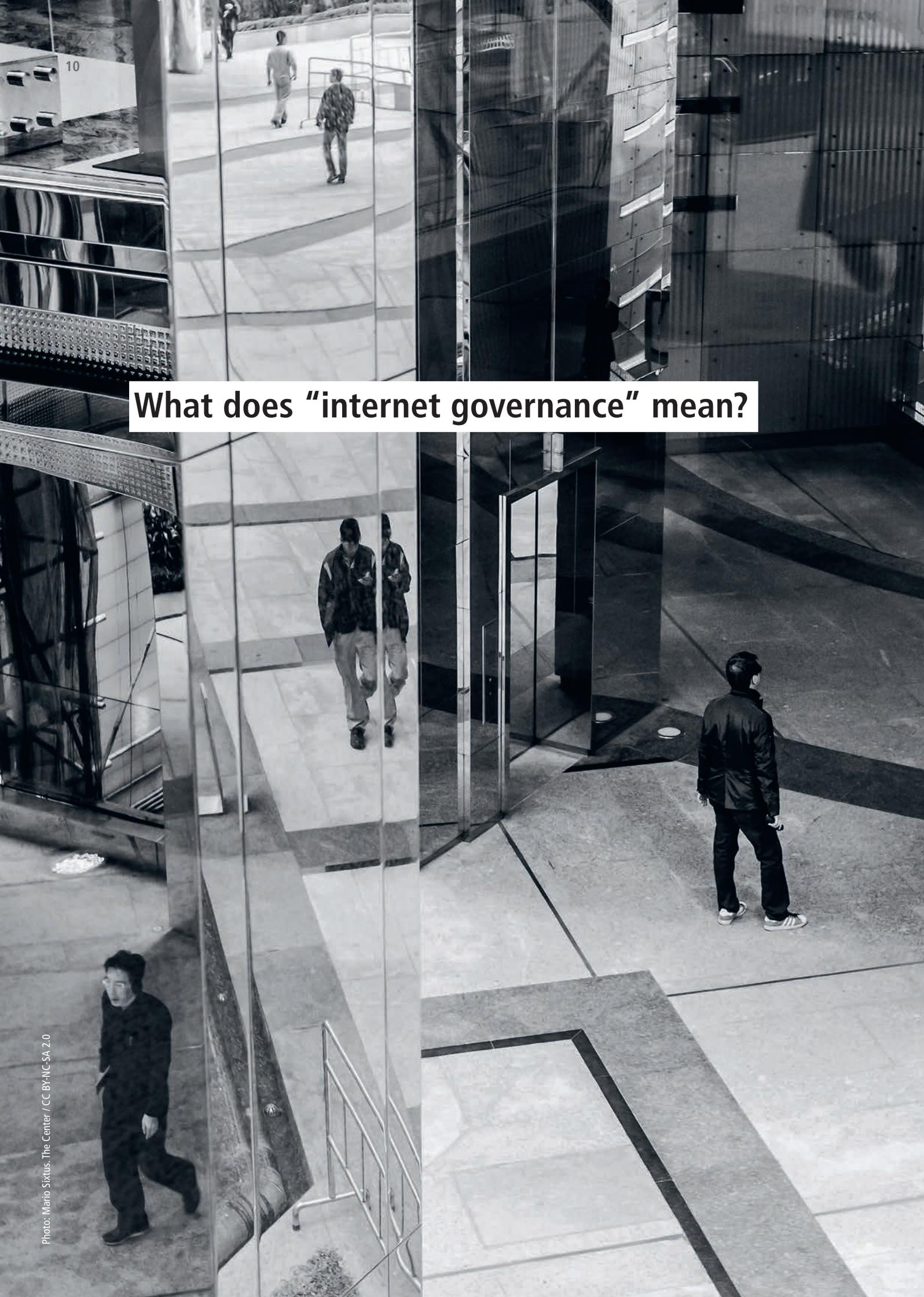
Nevertheless, this global “network of networks” also includes areas that cannot be regulated at a national level. Who decides, for example, how internet addresses are allocated? Who has determined that the German top-level domain is called “.de” or the French “.fr”? Who is responsible for monitoring and maintaining the functionality of the basic technical structure of the internet?

At the same time, efforts are being made to put an end to the legal fragmentation of the network as a whole. Civil rights and liberties on the internet, which have long been a matter of course for European citizens, should apply to everyone. The internet is to become a free communication space that benefits everyone in the world.

The field of internet regulations deals with issues that affect the internet as a whole and concerns itself with the internet’s future design. This publication is intended to explain what this means and who is involved in this field. Appended is a *glossary* that explains the terminology used in the text.

Internet governance includes more than just the administration and distribution of internet resources. It also involves fundamental questions of social, cultural, and economic participation in a digital society. It is time to consider creating a true “international law of the net”. The goal of an international law of the net would be to secure the adherence to human rights across the internet and to develop a digital charter of fundamental rights for the net. The protection of personal rights (data protection, encryption) and freedom of speech are of central importance here. Only in this way can different cultures and legal systems coexist peacefully in a connected world. And only in this way can we ensure that a digital society also remains an open, pluralistic, and democratic society.

Lars Klingbeil, MP (SPD), spokesperson for internet policy of the Social Democratic Party parliamentary group.



What does "internet governance" mean?

What are we talking about when we consider the current and future regulation of the internet? In the English-speaking world, the term “internet governance” has become the standard way to label the policy field described in the preface. In this publication, we use the terms “governance,” “regulation,” and “administration” of the internet synonymously. Now, what is the concrete meaning of these terms when applied to the internet?

The two core questions of internet governance

It is helpful to divide the topic into two core questions. On the one hand, there is the question of *who* is to govern the internet, i.e. who is (or should be) responsible for making decisions relating to the internet that are binding for everyone and that affect all users of the net. It is important to understand that the internet is not a single, unified structure, and that, rather, the term denotes a global “network of networks”, i.e. a conjunction of many individual networks which communicate with each other electronically. For this reason, the internet does not have a centralized administration or government. Therefore, the entities who are to make decisions regarding the overall structure of the internet will have to be determined, since this is not at all self-evident from its form as a “network of networks”. The

most important candidates and their respective roles are presented in a later chapter of this work: “Players in the field of internet governance”.

In addition to the question of *who* is to govern the internet, there is the second question of *what* specifically is to be included in the purview of the different players. The internet is first and foremost a technical structure. However, as mentioned above there is no other technology today that has impacted and changed our lives in an equally fundamental way. Hence it would be short-sighted to restrict the governance of the internet to the administration, extension and technical maintenance of the underlying infrastructure.

The four levels of internet governance

In order to present the different dimensions of the topic of internet governance clearly, four levels of implementation can be distinguished by their joint roles in composing the internet: infrastructure, logic, applications, and content.

Infrastructure includes the hardware that constitutes the fundamental structure of the global net: for instance, routers, switches, servers, and tools for data transmission such as copper or optical fiber cables.

Logic refers to the technical norms and standards that are the preconditions for communication to function on

a global scale. These include resources such as internet protocol (IP), web addresses, domain names, and the corresponding domain name system (DNS).

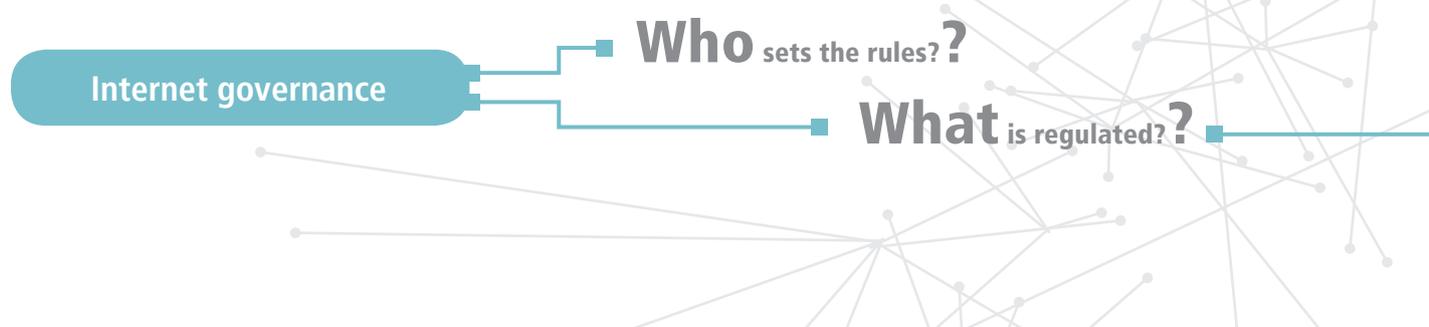
Applications is the part of the internet that primarily involves software that allows users to interact with each other and with other systems and websites. The most important and well-known of these applications is the World Wide Web, which can be accessed through internet browsers such as Firefox, Chrome, or Safari.

Content is the level that is most relevant to users. This level includes everything we see on the computer screen when we “go online”, i.e. text, sound, images, videos or other multimedia content, as well as virtual reality spaces.

From the technical to the political regulation of the internet

Initially, in the early days of the internet, internet governance was almost exclusively concerned with the first two levels—infrastructure and logic. The internet was viewed predominantly as a purely technical infrastructure. Hence, the problems that required regulation were primarily technical in nature. Since the internet was opened for commercial and other uses, and especially since it has entered and continued to impact an

Core questions of internet governance:



increasing number of areas of society, this narrow conception of internet governance has come to be considered insufficient. Currently, most political challenges relating to the internet take place on the level of content, e.g. questions of access to knowledge and culture, or human and civil rights on the internet. Accordingly, it is now generally recognized that internet governance refers to all four levels of the internet. This, however, does not preclude different institutions from being primarily responsible for different levels of internet governance.

In 2005, the United Nations initiated a worldwide summit, organized by the International Telecommunica-

tion Union (ITU), on the topic of “The Information Society”. Held in Tunis, about 17,000 participants from 175 countries convened to debate the future of the internet. The summit included an initial attempt to create a comprehensive definition of internet governance relating to all four levels. This definition is still in use today. It encompasses the development and application of uniform principles, norms, rules, decision-making processes, and programs for the internet, which are carried out by governments, the private sector, and civil society in their respective roles, and which all shape the evolution and use of the net.

A short history of the internet and internet governance

The technical structure we now know as the “internet” was created in the late 1960s as a research project by the US Department of Defense and a number of universities located mainly in California. Between 1984 and 1986, the National Science Foundation (NSF) extended this structure to form a general research network, connecting local networks of American universities for the purpose of exchanging information. Around this time, the term “internet” started coming into use.

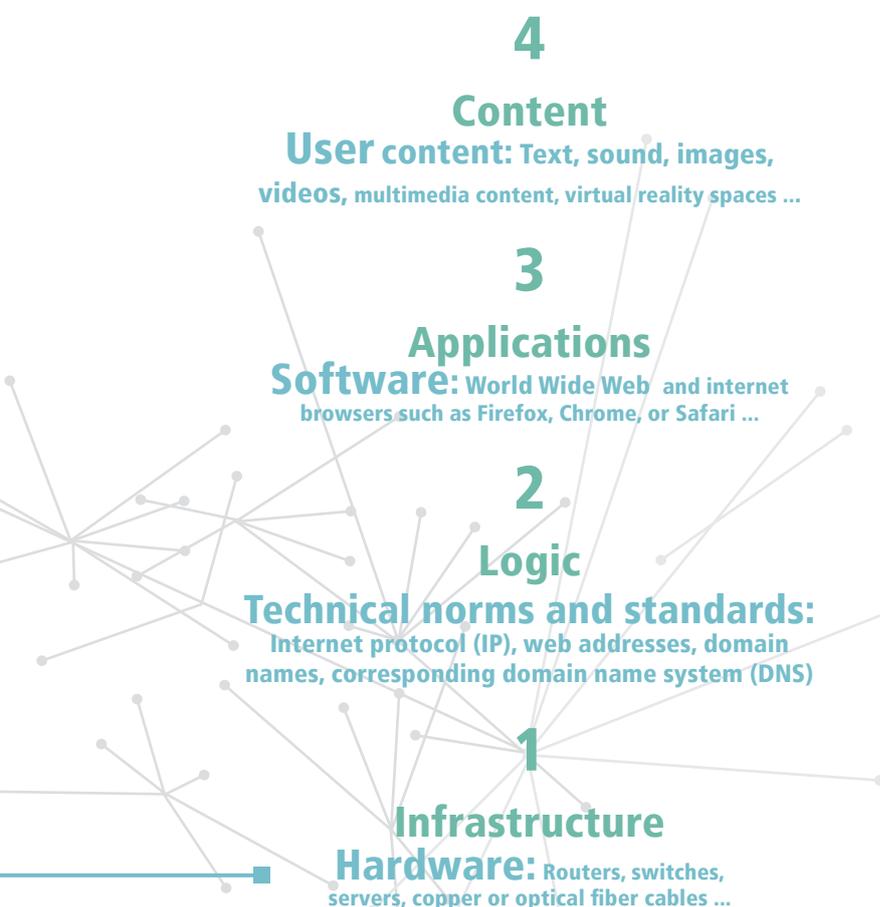
The internet spreads around the world

In the 1980s, other countries started connecting to the internet, among them European nations like the Netherlands, Italy, and Germany. Until 1991, the NSF had prohibited any commercial use of the internet; over the following years these restrictions were loosened, and by the middle of the decade, the internet had passed over into private hands. By the end of the century, the internet had grown considerably and commercial uses had become common. In 1998, the Internet Corporation for Assigned Names and Numbers (ICANN) was founded in California. This non-profit organization is still responsible for coordinating the domain name system and for dispensing IP addresses. Essentially, it maintains the technical structure of the internet.

The development of intergovernmental internet governance

As the internet became increasingly commercial, it did so under regulation initially characterized by multilateral agreements between states. As early as 1996, the World Intellectual Property Organization (WIPO) passed the two

The four Levels of internet governance:



Please continue on page 15.

“Interaction on the internet requires clear rules”

Interview with Dr. Thomas Fitschen, Director for the United Nations, International Cyber Policy and Counterterrorism at the Federal Foreign Office, Germany

What significance does digitalization have for German foreign policy? Is this topic being debated and negotiated more frequently now? And what role does the Cyber Ambassador play in it?

Thomas Fitschen: Cyber foreign policy is an interdisciplinary field that impacts virtually all areas of foreign policy. The Federal Foreign Office established a new department in 2001 to coordinate and unite all the issues involved: cyber security and international security, human rights on the net, the promotion of IT companies’ economic opportunities abroad, the digital agenda of

the EU, legal matters relating to the internet, and, of course, cyber topics regarding bilateral relationships with countries all over the world.

Since the summer of 2005, this department and the director for International Cyber Policy have been incorporated under the divisions of international order, United Nations, and arms control. In my role as director I function as a link between the Federal Foreign Office, its network of embassies abroad, and the political leadership. I am also the primary point of contact regarding questions of foreign policy and security for other ministries or agencies in Ger-

many. Finally, we deal with cyber issues in our bilateral relationships with other countries and international organizations.

Of course, we are eager to make an impact internationally, and we have been quite successful in this—for example, in the discussion about the right to privacy in the digital age. Together with Brazil and a number of smaller interested partners, we have been pursuing this topic at the UN and worldwide—and successfully! Another example is the internet and international security: Germany is the only country without a permanent seat in the



UN Security Council that was involved in all five UN expert committees on this question. When Germany held the chairmanship of the OSCE in 2016, we put forward the suggestion that not only the political and military, but also the economic and the human dimensions of cyber security (“cyber 3D”) should be considered. Further, we regularly hold bilateral cyber consultations with a number of important countries such as the USA and Brazil.

As a global system the internet is very difficult to regulate. Where do you see a need for general regulation in basic areas like cyber security and data protection?

Where do you see ethical concerns?

The German government aims to create rules that govern our interactions on the net. This goal was even put down in the coalition treaty of the preceding government. We are concerned with internet law as an interdisciplinary matter as well as with more innovative approaches to internet regulation such as multistakeholder processes. That’s what we campaign for. However, it is clear that it is a monumental task to come to a shared understanding on these questions. The fact that international law is applicable in cyberspace was first confirmed in 2013, after nine years of negotiations by experts at the United Nations. It wasn’t until 2015 that it could finally be agreed upon that this holds for the entire UN Human Rights Charter and that all countries are required to obey all UN resolutions regarding human rights.

In theory, this should be self-evident—in reality, however, it is highly contentious. Furthermore, some things don’t fall within the remit of the German government. For instance, the negotiations with the USA about data protection in transatlantic data traffic—the so-called “Privacy Shield”—were conducted not by the German government but by the European Commission, since they concern the European Union as a whole. We can at most exert an indirect influence there.

In the last few years, more and more so-called multistakeholder forums have been formed to address the question of international legal processes. Do you welcome this development?

Emphatically! The multistakeholder model has become functional; it has gained acceptance in many—though not all—parts of the world and has done well. All the interested parties, i.e. governments, economic actors, civil society, and the scientific community, contribute their knowledge and abilities and play a part in shaping the evolution of the internet. Over the course of many rounds of international negotiations, we have developed a formula that adequately reflects the complexity of cyberspace and the challenges arising from it: “Governments, as well as the private sector, civil society, and the United Nations and other international organizations all have an important role and responsibility, as appropriate, in decision-making processes.”

In your view, what is the difference between multistakeholder models and more traditional bilateral or multilateral agreements between countries? Do you consider them a valuable addition or could they even replace them entirely?

There are many countries that prefer a multilateral system of internet governance, determined by governments, in which all countries are to have the same rights, rather than pursuing the multistakeholder model. At first sight this seems convincing. However, it relegates the economy, civil society, and science to a subordinate position. That would be a bad state of affairs: without the standards and codes of the technical community, the infrastructure of the internet doesn’t work. Also, it is the private sector that provides the infrastructure and that drives innovation time and again. Civil society acts as a corrective within this dynamic, and the government interferes and passes regulations where necessary, e.g. for reasons of national security. This would be impossible to achieve purely via agree-

ments between countries. The countries of the EU are in agreement on this point, as are many of our transatlantic partners such as the US, Canada, and Brazil, as well as some countries in the Pacific area such as Japan and Korea.

Considering the process of digitalization and the opportunities and challenges it creates, should countries become more active in passing regulations, or should they try to promote the multistakeholder model, i.e. collaborate with economic players, the scientific community, and civil society, especially with regard to internet governance?

Germany is strongly committed to a free, secure, universally accessible, and trustworthy cyberspace. Over the last few years, the internet contributed 20 percent to the growth of the German GDP; three quarters of this were outside the IT sector. The internet creates opportunities for the German economy—think of “Industry 4.0”. Also, without the internet, globalization is inconceivable. The internet has become an important part of our lives. It is a political forum, it can be a valuable tool in science and education, and with regard to foreign policy, it can be an instrument for promoting freedom and human rights.

On the other hand, the misuse of information and communication technology can increase the temptation of trying to replace the internet with regional or even national networks. Any attempt to gag the internet by means of national governance is bound to fail. Instead, now and in the future, all stakeholders must be involved within the remit of their responsibilities in a positive way.

Let’s come back to the current debate: in your view, what are the crucial challenges for international politics regarding the topic of the internet?

There are four main areas we are concerned with. The first is cyber policy and international security. Given the availability of malware that individuals, criminal gangs, or even governments

can use for digital manipulations and to create significant damage both online and offline, how can we make sure that this does not lead to instability or a new arms race? Then there is the question of the so-called “international law of the net”: what rules are countries subject to in borderless cyberspace? What do we do when someone spreads content on a foreign platform, e.g. Facebook or Twitter, which is prohibited by German law, e.g. content containing incitement to hatred or violence? What rules apply to the relationships between foreign government agencies, private companies in other countries, and German citizens, for instance, regarding access to personal data? The third topic is closely related: how do we combat the misuse of the internet for criminal or terrorist purposes, and how do we do it in such a way that human rights and civil liberties on the net are maintained? How can governments improve the ways they cooperate on this issue? Finally, the last area is the above-mentioned multistakeholder model of internet governance which we need to defend.

Is there an area of the policy field of digitalization that is particularly important to you personally?

The term “cyberspace,” used as a shorthand in the political debate, must not be misunderstood to designate a space that exists independently of the rest of our lives and society, as if it were located “elsewhere” and as if we were able to enter and leave it at will. More accurately, we are talking about the penetration of digitalization into all areas of modern society, and what is valid offline is valid here, too. Therefore, the goals of our foreign policy—promoting peace, security, international order and human rights, prosperity and development—are also the goals of our international cyber policy.



Photo: Auswärtiges Amt

Dr. Thomas Fitschen has been Director for the United Nations, International Cyber Policy and Counterterrorism at the Federal Foreign Office since August 2015. Between 2012 and 2015 he served as Ambassador and Deputy Permanent Representative of Germany at the United Nations in Geneva. He studied law at the University of Kiel and joined the Federal Foreign Office in 1990, initially getting deployed to the German mission at the UN headquarters in New York, working in the area of social affairs and human rights issues, and to the German embassy in Manila. Afterwards, he worked in the Division for International Cooperation against Organized Crime and Terrorism, then as Deputy Head of the Task Force Global Issues in Berlin. Between 2005 and 2008 he worked as legal adviser to the German Mission at the UN in New York. Then he served as Head of the General Assembly Affairs Division (Political and Social Issues) and of the FFO’s Task Force for Promoting the Rule of Law. From 2011 to 2012 he was a member of the faculty at the Geneva Center for Security Policy.

so-called “internet treaties”: the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). The purpose of these treaties was to make copyright laws of participating countries fit for the digital age. Further treaties concerning internet regulation were created by various countries in the context of the World Trade Organization (WTO). These treaties include the GATS Treaty, passed in 1995, which concerns the global market of telecommunications services. Another milestone of international regulation was reached in 2001, when the Council of Europe passed the Budapest Convention, which addressed the topic of cybercrime in detail for the first time.

The role of the UN: from the World Summit to IGF

By the beginning of the 21st century, the crucial role of the internet in global society beyond mere commercial use had become undeniable. In order to keep up with this development, the International Telecommunication Union (ITU), a specialized agency of the United Nations, was tasked with organizing a world summit on the topic of “The Information Society” (World Summit on the Information Society, WSIS). It was held in two parts, the first of which occurred in Geneva in 2003, and the second in Tunis in 2005. The most important result of the 2005 Tunis summit was the founding of the Internet Governance Forum (IGF) as a permanent platform for discussing questions involving the regulation of the internet. The 11th and most recent meeting of the IGF took place in Guadalajara, Mexico, in 2016.

Finally, the NETmundial Initiative, founded in São Paulo, Brazil, in April 2014, is worth mentioning for its incorporation of various stakeholders—economic actors, NGOs, etc.—outside of government in the development of a non-binding agreement about the principles of internet governance. However, a follow-up meeting of the same name in Geneva later that year was criticized for abandoning the original multistake-

holder model in favor of granting power to big corporations from the digital economy. In the summer of 2016, it was announced that the initiative would not be continued.

The levels of politics and content in internet governance

Assuming that internet governance must not be restricted to the technical administration of network infrastructure, but rather must extend to all four levels of the internet, several issues can be identified that are currently being addressed by internet regulation.

Stability of infrastructure, cooperation, and foreign aid

From a technical point of view, extending and securing the infrastructure of the internet is absolutely necessary. In order to function as a network of global communication, the internet must be reliable and trustworthy, as formulated in the official statement of the above-mentioned multistakeholder NETmundial Initiative at its conference in 2014. Cooperating with the countries of the Global South is especially important when it comes to the goal of creating and extending internet infrastructure.

The so-called digital divide between developed and developing countries has to be closed. Many people are still unable to access the internet, and this limits the opportunities for economic development in the countries concerned. Having open and stable access to the internet also gives citizens access to a wider range of political information, which could positively impact the development of democratic structures.

This kind of cooperation and aid also brings immediate advantages for the rest of the world: it has become clear, especially in recent years, that a weakly developed and insufficiently secured internet infrastructure is susceptible to hacking attacks anywhere in the world.

Internet security policy

The question of security has been at the forefront of the international discussion of internet regulation in recent years. Cyberattacks on critical pieces of infrastructure in various countries, allegedly carried out or at least facilitated by other countries, have drawn widespread attention in the media, though the most sinister scenarios—lethal “cyber wars”—have remained in the realm of fiction. Nonetheless, many experts assume that conflicts between countries as well as between countries and other kinds of political groups will be increasingly waged over the internet in the coming years. Since there are currently numerous legal uncertainties

in this area, there is an urgent need to include this question in forums dealing with internet governance. Any measures negotiated in this arena, such as confidence building between nations, could help to decrease any risk of escalation.

In addition to solving internet conflicts between states, the topics of cyber-crime, terrorism and hacktivism also fall under the rubric of security. The problem of crimes being committed on or via the net has been on the international agenda for some time. In 2004 the Budapest Convention, initiated by the Council of Europe, came into effect as a countermeasure.

Human and civil rights on the net

More recently, the topic of human and civil rights on the internet has come to the forefront as another field of internet governance. The debate on this question was catalyzed by the revelations made by NSA whistleblower Edward Snowden in the summer of 2013, which alerted the international public to surveillance activities carried out by intelligence agencies via the internet. The classified documents brought to light by Snowden made clear how extensive the online surveillance of citizens carried out by intelligence agencies has now become.

The right to privacy, in the sense of the right not to be subjected to arbitrary or permanent online surveillance by governments or economic actors, has



already been mentioned in the multi-stakeholder agreement drafted by the original NETmundial Initiative. That same document also formulates several other principles relating to the regulation of human or civil rights on the internet, but it is only a recommendation and is not legally binding on any countries or other players. The authors of the agreement put forward the basic assumption that the civil rights that belong to every person and that are protected offline should be acknowledged and protected in the same way online. These rights include freedom of opinion and speech, freedom of assembly and association, and freedom of information. These civil rights are especially threatened on the internet, for instance through government surveillance or in countries run by autocratic or other illiberal regimes.

The right to access the internet as well as the corresponding human right of development must be vouchsafed, since the internet plays a vital role in the economic and social development of countries and societies. Like no other technology before, it has the potential to help people work their way out of poverty, and it must be allowed to be utilized as such by all.

Another question to consider is that of net neutrality, which has been challenged in recent times. In and of itself net neutrality is a technical or infrastructural aspect, but it is also closely connected with the question of human and civil rights on the net. The term “net neutrality” refers to the treatment of all data packets distributed on the net on an equal plane. This is connected with the above-mentioned rights because governments can, for instance, restrict access to certain information on the net by assigning or allowing the assignment of corresponding data to a lower priority than commercial or other “unpolitical” data. Therefore, the topic of net neutrality must be part of any comprehensive internet governance.

Legal developments

The development of laws relating to the internet can be viewed as an encom-

passing field covering all the aspects of internet governance mentioned so far. While most experts agree that almost all the rules created for the offline world can claim to extend to the internet as well, the technical makeup of the internet creates certain singularities that render a simple transcription of those norms difficult. Therefore, it seems necessary to create new or adjusted rules, at least in certain cases.

Many observers of the current online situation doubt that the countries of the world will succeed in creating a body of international law that would reg-

the other hand, it is still conceivable that certain limited areas of internet governance could be established in the form of treaties between countries. The successful creation of the Budapest Convention on Cybercrime shows that it is possible to develop international agreements at least for specific areas of internet governance.

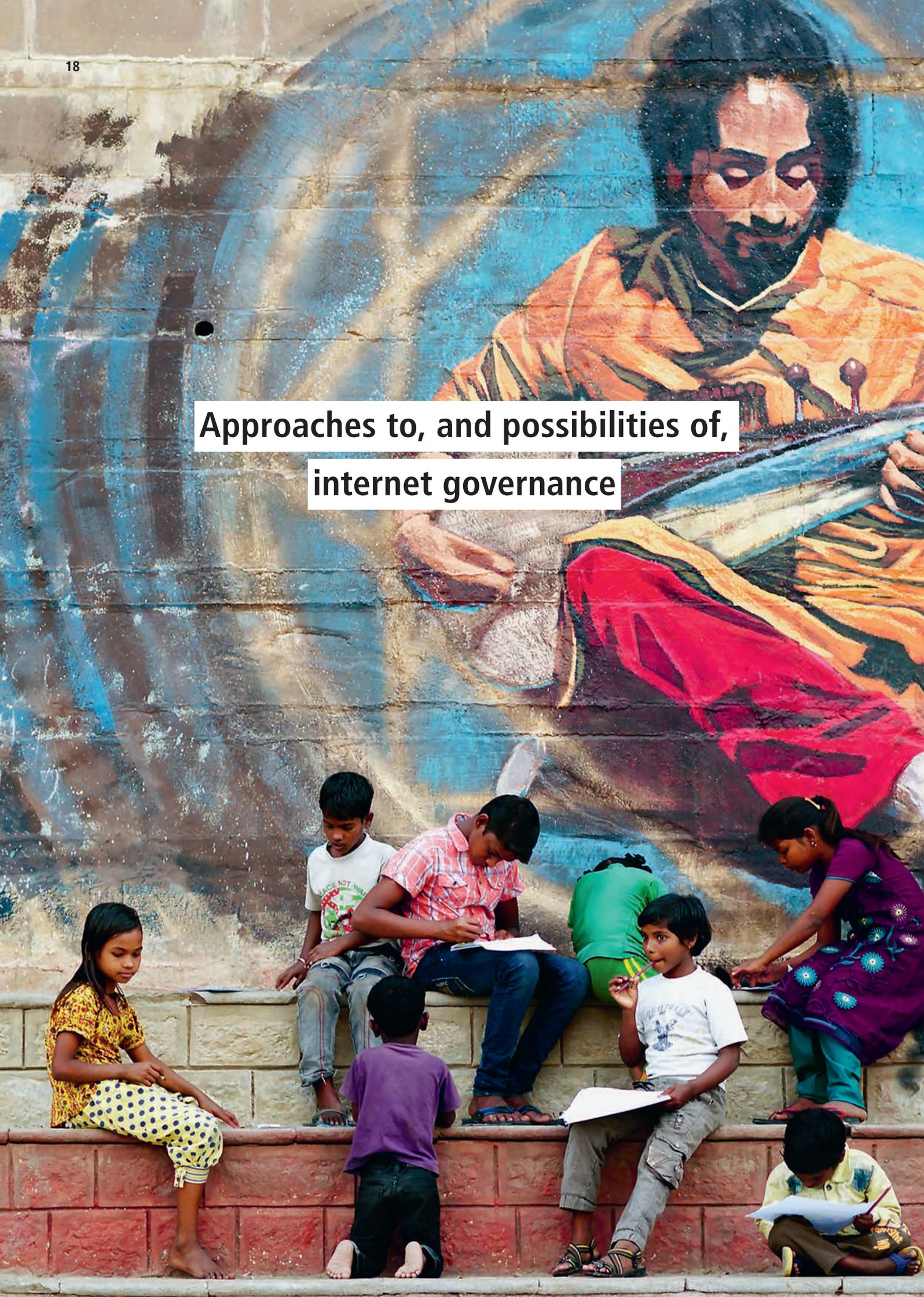
However, international law is only one possible way to proceed when it comes to legal developments in the field of internet governance. Different approaches are presented in detail in the next section.

The necessity of regulating the internet by law seems obvious. Since the virtual world does not exist in isolation from the physical world, actions taken on the internet invariably have an impact on the real world. The network of regulations currently existing consists of different national laws, agreements about self-regulation, and a number of multilateral treaties of differing relevance. Matters are made more difficult by the fact that the internet, as well as the means to govern it, are in a continual state of change.

Professor Dr. Rolf H. Weber, Professor of Civil, Economic and European Law, University of Zurich.

ulate the legal matters of all participants and stakeholders comprehensively and bindingly at any point in the near future. Concrete drafts of such treaties were put forward by the Russian Federation and the People’s Republic of China; however, they were found to be incompatible with the above-mentioned civil rights and hence with existing international law, and the majority of the international community rejected them. Nevertheless, the goal of establishing internet governance as part of international law should not be abandoned. There are two primary methods to achieve this goal. On the one hand, a corresponding development might occur through the emergence of common law, i.e. without establishing international treaties. Any rules coming into existence in this way are equivalent to international law. On

Approaches to, and possibilities of,
internet governance



All countries and other participants in internet governance agree that the internet as a global communications structure is in need of regulation. However, how this is to happen, and who will preside over it, are questions for which there are no clear answers. In the following text, different approaches to internet governance are presented with the help of comparative conceptual pairings. There can be overlap between some of the pairs: for instance, the multistakeholder model is a bottom-up version of regulation that usually operates according to transnational mechanisms and leads to the creation of soft law. However, the two concepts are not perfectly equivalent. Hence, it is useful to describe them separately, in order to understand different approaches to internet governance more easily.

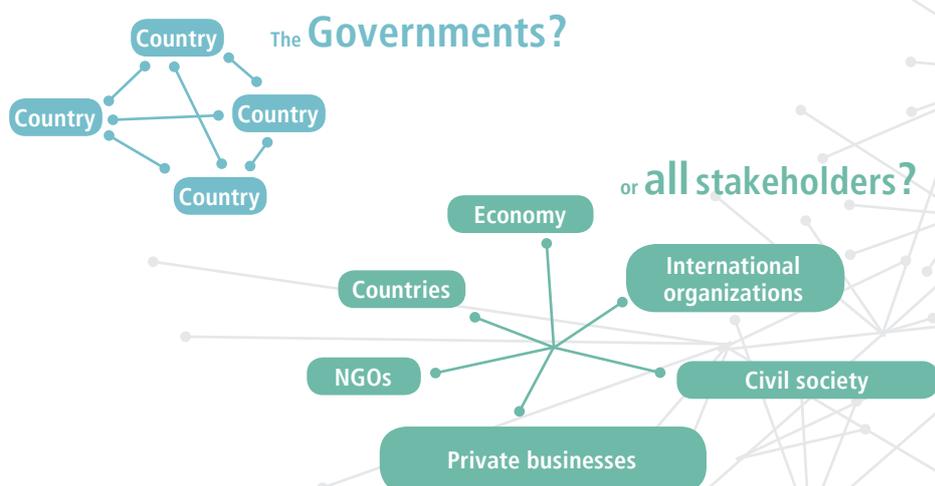
Intergovernmental versus multistakeholder models

The two main approaches to developing regulations concerning the internet are the intergovernmental model of governance and the multistakeholder model.

Intergovernmental governance

Intergovernmental governance consists of regulations created between specific countries or their respective governments. This is the traditional approach of international politics: national representatives meet at conferences or summits and engage in debates on the issues posed by a specific policy field, then they suggest solutions and negotiate how these suggestions can be cast as laws and regulations. Most of the international treaties currently in effect came into existence in this way, for instance, the Charter of the United Nations, the Law of the Sea Convention, and the Geneva Convention on Refugees. Resolutions of the UN General Assembly and the Security Council are also passed in this way. Virtually all preeminent international organizations, such as the Council of Europe, the African Union, and the World Trade Organization, operate similarly. The fundamental modus operandi of the European Union also follows the same pattern. This model gives the countries involved full control over both the process and the results of drafting regulations. With regard to internet governance, the primary example of the

Who should set the rules? ?



intergovernmental model would be the International Telecommunication Union.

The multistakeholder model: involving everyone concerned

The multistakeholder model is relatively new compared to the more traditional intergovernmental one. It attempts to involve all players that are impacted by an issue or policy as equal participants in the process of decision-making. Who the relevant stakeholders are depends on the field of policy in question. In the area of internet governance, they are the governments of the world's countries, private businesses engaged with the internet, representatives of civil society, NGOs, and international organizations. The multistakeholder model was first suggested by the Working Group on Internet Governance as a result of the first part of the World Summit on the Information Society in Geneva in 2003. It was designed as a compromise between exclusive governance by private busi-

nesses on the one hand, and exclusive governance by national governments on the other. Today this approach continues to be pursued at ICANN as well as at the Internet Governance Forum.

An ongoing conflict

Although leaving global internet governance solely in the hands of private businesses is no longer considered a serious option today, due to the enormous economic, social, and political importance of the internet, there is considerable disagreement regarding the question as to which of the two above-mentioned approaches to internet governance is preferable. While Western nations have emphatically endorsed the multistakeholder model, a group of countries including China, India, Russia, Iran, and Saudi-Arabia have demanded extending the mandate of the International Telecommunication Union to the whole of internet governance. This suggestion was last made at the ITU Conference in Busan in 2014. The latter of the countries

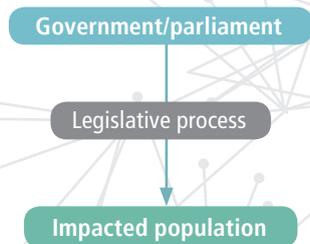
mentioned above defend the view that an international organization using the intergovernmental model is best suited to protect their interests. However, the way voting works at the ITU is worrying to the representatives of Western nations, since non-democratic governments can use their votes relatively easily to block progressive regulations concerning the implementation of citizens' liberties and rights on the internet.

However, it is not only authoritarian regimes that have voiced concerns about the multistakeholder model. Many governments of countries in the Global South have remarked that most of the stakeholders involved are from rich industrial nations. They point out that, for instance, anyone unable to raise the funds necessary to attend the relevant events would not be sufficiently involved in the multistakeholder process. Thus, decisions affecting all users of the internet might be taken without the required representation of poorer countries, which would put them at a disadvantage. It is to be expected that this

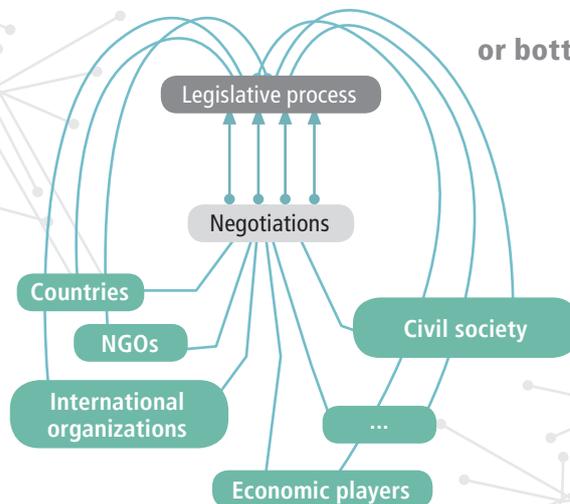
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How should regulations be created?

Top-down?



or bottom-up?



“Internet regulations can only be created collaboratively”

Interview with Dr. Wolfgang Kleinwächter, Professor of International Communications Policy at Aarhus University and consultant to various committees and institutions dealing with internet governance, such as the UN, the Council of Europe, and ICANN.

What is the difference between internet governance and other fields of regulation? What are its particularities?

Wolfgang Kleinwächter: Initially, internet governance was concerned with regulating technical details, for instance, how different services and servers should communicate with each other. Nation states were not involved at all. At the end of the 1960s, a process called “Request for Comments” (RFC) was developed, which is the code of law, so to speak, of the internet. These RFCs arise within groups formed by the

technical community itself. They are not bound by the traditional criteria of legislation, such as a territory or a population. The process of debating issues is completely open—anyone interested is able to participate. That’s the big difference between RFCs and negotiations of laws in parliament or of treaties between countries.

How did it come about that a method of developing regulations involving everyone concerned was able to gain a foothold outside the technical community?

During the 1980s and 1990s it became clear that the technical and the political regulation of the internet could not be separated. The legal expert Lawrence Lessig expressed this poignantly through the slogan “code is law”. The technical code determines spaces within which legislative agencies act. The relationship between those writing the code and those writing the laws formed the driving force for the new political approach, the so-called multistakeholder model. In this model, it is not only governments that develop the necessary rules for the internet;



the technical community, the economic sector, and civil society also have to be involved on an equal footing.

Wouldn't it be sufficient to regulate things on the technical level? Why do we need the other players, i.e. economic actors, the scientific community, civil society, or national governments?

The technical structures of the internet and the applications running on it have far-reaching political, economic, and cultural implications. For instance, 20 years ago the mp3 format shook an entire industry—the music industry—by introducing a highly effective method of compressing audio files. This raised entirely new questions about intellectual property and copyright law. The technical innovations undermined existing business models and legal systems. This shows that it is absolutely necessary to involve everyone who has a stake in these pro-

cesses, and to involve them as equals. Leaving internet governance solely to governments is a proposition bound to fail: technical issues and new business models tend to make laws obsolete, or civil society might object and take to the streets to protest their exclusion from such impactful decisions. The only way to find sustainable solutions is to allow everyone impacted to participate in the process of developing laws and regulations governing the internet.

What's the role of science in this process?

The scientific community is a stakeholder of a special kind because it is involved in numerous ways in the regulatory and technical processes of the net. Scientists often work as consultants for governments and within the private economy. They are in close contact with civil society and they engage with the political and social questions

raised by digitalization. It is their job to educate other players about their role. They have to make suggestions in the legal domain about what effective alternative regulations could look like. And, of course, they are involved in developing the technical infrastructure of the internet.

Kofi Annan, the former Secretary General of the United Nations, said at the first meeting of the Working Group on Internet Governance in 2004 that the internet is the result of a technical innovation. That's why politics also requires new approaches to policy and democracy. Scientists can play a role here by enriching the traditional field of policy and governance with new, innovative concepts.



Photo: Wolfgang Kleinwächter

Wolfgang Kleinwächter is Professor Emeritus of Internet Policy and Regulation at Aarhus University. Between 2013 and 2015, he was a member of the ICANN board of directors, and between 2014 and 2016, he was special ambassador of the NETmundial Initiative. Since the end of the 1990s, he has been involved in international negotiations on internet governance. Kleinwächter was a member of the UN Working Group on Internet Governance and was chair of the expert committee on internet governance at the Council of Europe. In addition, he was a member of the executive committees of several EU research projects on the internet. He is the founder and director of the Summer School on Internet Governance (SSIG). Kleinwächter was a member of the delegation of the Danish government at the World Summit on the Information Society (Tunis 2005), and of the delegation of the German government at the World Conference on International Telecommunications (Dubai 2012). He is the author of numerous books and has been invited as an expert consultant to sittings of the European Parliament and the German parliament (Bundestag).



Photo: Gregor Fischer / re:publica, CC BY 2.0

conflict will continue at the next major ITU conference, which is scheduled for 2018 in the United Arab Emirates.

Top-down versus bottom-up

The two approaches just presented are closely connected to another pair of concepts: the top-down and the bottom-up approaches to creating regulations. “Top-down” refers to decision-making processes that are carried out by an entity invested with higher authority. The standard example of such processes in the realm of national politics are laws passed by the legislative powers—in Germany, these are the Bundestag and the Bundesrat. The federal powers have indeed received their legislative mandate from the “bottom,” i.e. from the citizens via periodical elections. However, the actual process of drafting legislation takes place in highly formalized processes on the governmental level. The laws passed in this way then impact the “bottom”—the citizens not directly involved in creating the actual legislation. This manner of passing binding legislation is the hallmark of representative democracies. In the area of internet governance, it is applied wherever countries themselves are the sole agents in a process of decision-making. This is the case predominantly in the intergovernmental forums and international organizations in which norms are created that oblige and bind the countries involved and, hence, their citizens through a “top-down” effect. In the field of internet governance, a typical example would again be the International Telecommunication Union.

The multistakeholder model: a traditional “bottom-up” approach

In contrast to the model just described, the multistakeholder model is characterized by a “bottom-up” process. The stakeholders participating in the decision-making processes of the multistakeholder model act as equals. With regard to internet governance, this means that representatives of civil society or the

economy can also exert a direct influence on the outcome of negotiations, instead of first conferring a mandate on democratically elected representatives. The advantage of this grassroots version of democracy is that, ideally, those who are impacted by a decision get to have their own voice in the process of its adaptation. This approach has been criticized as well, however, for possibly granting economic players or other powerful entities a disproportionate influence—a danger, it is claimed, which can theoretically be minimized under the aegis of representative democracy. Furthermore, according to this point of view, the body of law that results from “bottom-up” processes tends to be fragmented and occasionally even contra-

Multilateral/bilateral versus transnational

Another set of concepts, closely connected to those already mentioned, which can serve to differentiate between different ways of developing regulations in the field of internet governance consists of “multilateral” or “bilateral” processes on the one hand, and “transnational” processes on the other.

Decision-making processes are called multilateral or bilateral if they are conducted between governments in an international context. This can occur in a group of several countries organized at international conferences or within international organizations, or it can take place simply between two nations.

The term “internet governance” designates international procedures for creating rules that function without the legitimization of parliaments or international organizations. Even so, these are political decisions that impact and shape the course of events at a global scale. Although official representatives often speak of consensus-based processes in this field, there are concrete conflicts of interest in which powerful and less powerful players need to negotiate solutions.

Professor Dr. Jeanette Hofmann, Director of the project group “Internet Policy Field” at the WZB Berlin Social Science Center.

dictory. A positive example of a (non-legally binding) document developed through a bottom-up process—and one that involved thousands of people from governments, the private sector, civil society, the economy, and the tech community—is the so-called “stakeholder statement” created at the NETmundial Conference, which lists a number of principles to which internet governance should adhere.

Bilateral processes usually aim to create a bilateral agreement. Due to the global structure of the internet, bilateral agreements concerning internet governance—apart from, say, questions of extending the infrastructure in regions near the border—are quite rare. The crucial arrangements for the issues not addressed by the scope of bilateral agreements are instead more aptly established in multilateral forums. The ITU again serves as a useful example here.



Photo: Leo Hidalgo. Futuristic place / CC BY-NC-ND 2.0

Transnational: beyond rather than between nations

A process is called transnational if it takes place in an international context, but not necessarily between nations. To clarify, transnational processes transcend national borders without national governments having exclusive control of them. Again, in this case, it is a matter of involving representatives of civil society in the decision-making process. The multistakeholder models at ICANN and IGF are paradigmatic examples of transnational mechanisms in internet governance. There are few areas in need of regulation that are as suited to the transnational approach as the internet, given that its structure is inherently transnational. National borders do play a role on the net, which German users will notice immediately when they travel to Spain, try to access the online multimedia library of the public broadcaster ZDF, and are prevented from doing so by so-called “geoblocking”. However, many of the basic structures of the internet are designed transnationally, a feature that renders purely national solutions to its governance frequently inadequate.

■ **What form** should regulations take? **?**



Hard law versus soft law

Finally, regulations in the field of internet administration can fall into the categories of either “hard law” or “soft law”. “Hard law” designates those norms that can be identified as actual, genuine law, i.e. norms that force anyone subject to them to perform, or refrain from, certain actions. Hard law can be enforced through different means. A verdict in a court of law is the obvious way, but by no means the only one. When it comes to international law, especially, there is often no specific legal authority that is responsible for enforcement. This does not imply, however, that such regulations do not constitute hard law. Violations of such norms can be sanctioned in other ways, for instance by a resolution of the UN Security Council.

To govern the internet effectively, a large number of treaties, laws, and other regulations in the form of hard law are necessary. An example of an international treaty concerning internet governance would be the above-mentioned Budapest Convention on Cybercrime, which was created by the Council of Europe in 2001 and codifies a number of rules on combating cybercrime internationally. What is remarkable about this convention is that although it was created under the aegis of the Council of Europe, it is open in the sense that any country can ratify it even if it is not part of this international organization. As of today, the US, Canada, Japan, and Israel have joined the convention and have declared themselves bound by the regulations it contains.

On the other hand, “soft law” refers to agreements or statements that contain directives to anyone subject to the document but that cannot be enforced in a reliable way. On the international level soft law is very common. Many conferences or other meetings of national representatives do not result in binding resolutions or even international treaties, but rather in letters of intent or foundational agreements that express a consensus without encompassing any concrete, applicable law. Resolutions of

the UN General Assembly fall into this category. In contrast to the resolutions of the Security Council, they are not enforceable.

Another important form of soft law is the application of codes of practice, i.e. collections of principles and rules of conduct that are valid for a specific, definable target group and that are often created by the target group itself. In rare cases, such codes of practice can be counted as hard law if they include mechanisms of enforcement, which are usually utilized by appointed members of the group.

The advantages of soft law

The primary advantage of soft law lies in the fact that it is usually created more quickly and easily than regulations classified as hard law. The latter often involves strictly formalized and drawn-out processes of drafting legislation, while soft law merely requires the consensus of the parties involved. This is one of the reasons why soft law is very common in the field of internet governance, which currently lacks formal structures for the most part.

Multistakeholder processes often result in conclusions or statements that constitute soft law. The above-mentioned Stakeholder Statement of the NETmundial Conference and its principles of internet governance form one example. Solutions in the form of soft law have also been proposed for the whole issue of transnational cyber security beyond mere computer crime. For instance, the German government proposes elaborating a “Code of Conduct” in order to regulate the responsibilities countries have in their interactions with each other concerning cyberattacks. The draft of an international treaty on cyber security submitted by China, Russia, and a number of other nations was rejected by the Western nations because it contained too many restrictions of civil rights on the internet. Especially in view of such fundamental differences in values, non-binding sets of rules are far more likely to be agreed upon at the transnational level.

However, it should not be concluded from the non-binding nature of soft law that it has no regulatory impact. Once approved, such principles can often have a lasting effect on their target group: following their establishment, the more parties that adhere to soft laws and that treat them as binding actually cause them to accumulate force and to become, in a way, hard laws.

Players in the field of internet governance

There are many different players involved in the field of internet governance, as made clear in the preceding section. Especially with regard to the multistakeholder model, it is necessary to determine who the actual stakeholders in the internet are, so that they can be heard and involved in the questions of internet governance. In what follows, the most important players in the multistakeholder model are described.

Countries

In defining the relevant parties in the governance and administration of the internet, an obvious first step is to name countries themselves. It is true that for most ordinary users their interactions with the internet are mediated by the private economy: in order to go on the

subject to the laws and other regulations of the country they are in when they go online. Thus, every country initially creates its own laws of internet governance that are in effect within its own territory. Beyond that, the cross-border infrastructure of the internet, such as the transatlantic submarine cables carrying intercontinental data traffic, are provided and maintained by the countries involved collaboratively.

Proponents of the intergovernmental approach view countries, together with the international organizations that involve these countries as members, as solely responsible for internet governance. Advocates of the multistakeholder model, too, usually assume as self-evident that countries are stakeholders. Remember that this approach was developed as a compromise between purely private and purely intergovernmental solutions of internet governance. Thus, national represent-

Actors from civil society and the private economy

The multistakeholder model is concerned primarily with involving everyone who will be impacted by a decision in the decision-making process, and so includes groups from both civil society and the private economy. This holds especially for the Internet Governance Forum, whose Multistakeholder Advisory Group (MAG) is composed of representatives from various stakeholders, including civil society, science, the tech community, and the private economy.

Civil Society

In Germany there are a number of interest groups, think tanks, and NGOs that are active in the field of internet governance and that can be classified as civil society stakeholders. They include, for example, the German chapter of the Internet Society, the Chaos Computer Club, and Digitale Gesellschaft (Digital Society). These organizations are concerned with general political questions involving the internet. They contribute to the debate by conducting studies or expert panels in preparation for important internet conferences.

In addition, some organizations should be mentioned that do not focus specifically on topics of the internet. For example, organizations such as Amnesty International or Human Rights Watch have committed themselves to the task of monitoring, analyzing, and classifying whether human and civil rights are abided by on the net, and to sound the alarm if the situation worsens in any specific location. For some years now, the think tank Freedom House, based in Washington, D.C., has published a yearly report called “Freedom on the Net” that summarizes and evaluates the status of freedom on the internet across the world. Many of these NGOs also contribute to

Data protection, mass surveillance, and copyright law—these are only some of the questions of internet policy being contested around the world and which often leave basic rights by the wayside. It is, after all, still not the case that all parties concerned participate as equals in the forums on internet regulation. The processes of internet governance must be further reformed in order to allow civil society to fight for a democratic internet worldwide and to defend its rights and liberties.

Kirsten Fiedler, Managing Director of the Network of European Digital Rights (EDRI)

net, we make a contract with an internet provider. Our browsers are programmed by private companies such as Mozilla, Microsoft, and Apple. Search engines and social networks are also run by companies like Google, Facebook, and Twitter. However, as a cross-border and global technical structure, the internet still requires governmental regulation in each country. Internet users are always

atives are usually present wherever internet governance is debated. This holds for the meetings of the Advisory Committee at ICANN as well as for conferences of the Internet Governance Forum (IGF).

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“Multistakeholder models can serve well in complex societal negotiations”

Interview with Ulrich Kelber, MP (SPD), parliamentary undersecretary at the Federal Ministry of Justice and Consumer Protection.

What is the significance of digitalization for national and international legal policy? Is this topic being debated and negotiated more frequently now?

Ulrich Kelber: Digitalization is of supreme political importance because of how profoundly it has been changing our lives, our ways of communicating, and our workplaces. Since nothing is as globalized as data traffic, national political regulations are bound to be of limited utility. On a European level, we can accomplish much more. Europe is an

economic area of 500 million people. If we use our economic power, we can protect our principles of liberty and self-determination in the digital world as well. The General Data Protection Regulation is a very good example of this. In effect from May 2018, it sets the legal framework for data protection within the European Union. All companies have to abide by it, even the ones that do not have a registered base in the European Union but do offer goods or services on the European market. The General Data Protection Regula-

tion protects citizens' free decisions regarding the use of their data, and finally creates uniform standards for European businesses. The new European data protection law is proof of the fact that we are not powerless against the looming abolition of privacy and the power of the global players in Silicon Valley.



As a global system the internet is very difficult to regulate. Where do you see a need for general regulation in basic areas like consumer protection, data protection, and data security? Where do you see ethical concerns?

I think the topics you mention are closely connected. Data protection and data security are very important to consumers. Both issues are very important ethically as well, for instance in the area of Big Data applications and the question of the predictability of human behavior. Some time ago, Heiko Maas, Federal Minister of Justice in Germany, published an “Internet Charter” in the newspaper *Die Zeit* detailing 13 principles for the digital world (Maas 2015). The Charter explains what principles guide us in our digital policies. For instance, it states that every human being has the right to determine their digital identity themselves, and that the core part of how people lead their lives, i.e. their most private sphere, must remain absolutely protected; that every human being has the right to express their opinion freely on the internet—which, however, does not permit anyone to pour out their hatred and calumny onto others.

In the area of data protection and data security, the first task is to bring German law into conformity with new European standards. Legislators still have a few points to sort out before the General Data Protection Regulation can be applied in Germany in 2018. The most important decisions on data protection have been made within the General Data Protection Regulation itself. We have succeeded in maintaining the existing standard of data protection and improving it in important areas. There are more precise regulations now about an agreement actually being voluntary, and about online policies that require an agreement not putting users at an unfair disadvantage. This is important because agreeing to an online policy is an expression of the users’ control over their data.

In the last few years, more and more so-called multistakeholder forums have been formed to address the question of international legal processes. Do you welcome this development?

It’s a very interesting development. We now use multistakeholder forums to hold a dialogue on a number of topics with economic actors, civil society, the scientific community, and other players. This kind of exchange is especially valuable when it comes to complex international developments that single countries alone cannot solve. Developing rules for the digital world is one of them. The Internet Governance Forum of the United Nations is an example of how new ideas can be introduced.

In your view, what is the difference between multistakeholder models and more traditional bilateral or multilateral agreements between countries? Do you consider them a valuable addition or could they even replace them entirely?

Multistakeholder models are a valuable driving force in various complex societal developments and an important means of finding solutions quickly. These approaches are especially valuable when international negotiations between countries run into difficulties because different countries are pursuing different agendas. We shouldn’t forget, however, that often not all stakeholders have the same opportunities to assert their interests. I’d like to point out that many policy fields have already been addressed in multinational and regional treaties of international law that are binding in the context of the evolving digital world as well. For instance, human rights are in effect on the net, too. Agreements on changing or developing international law do not come into existence overnight. Such negotiations take time and sometimes one has to proceed carefully, step by step, to accomplish progress on important topics. This is true of the topic of digitalization as well. Together with Brazil we initiated a development here when we submitted the resolution

on the right to privacy in the digital age, which contains a basic consensus of the international community, to the UN General Assembly in 2013. Currently the third follow-up resolution is being planned.

Considering the process of digitalization and the opportunities and challenges it creates, should countries become more active in passing regulations, or should they try and promote the multistakeholder model, i.e. collaborate with economic players, the scientific community, and civil society, especially with regard to internet governance?

The multistakeholder model has its advantages, but also its limitations. Binding national legislation is often better suited to accomplish a balance of interests of the parties concerned, especially when the interests of the public are involved or when there is an imbalance between the players, e.g. between consumers and companies holding a powerful market position. Also, only national laws have been democratically legitimized. However, it is often difficult to effectively enforce national legislation in the digital world. The state of affairs there is often constituted internationally, and law enforcement in cross-border situations can run into difficulties. Hence it is necessary for countries to have an exhaustive debate on the various possible models of regulation and to collaborate closely in their subsequent implementation. Sometimes it makes sense to combine the two approaches. We will do this next year when Germany becomes chair of the G20 [antn: this refers to 2017 as the interview was conducted in 2016]. For example, together with the consumer agencies and their global association, we will convene a G20 Consumer Summit that will explore the ramifications of digitalization for consumers and possible solutions to the problems they present. We will invite consumer agencies, economic experts, the scientific community, and government departments from the G20 countries. Also, we will hold a meeting of the G20 digital secretaries in which

we want to include aspects of consumer policy.

Let's come back to the current debate.

In your view, what are the crucial challenges for international politics regarding the topic of the internet?

The global challenges are quite different from the ones in Germany. Here we are justified in bringing up broadband upgrades, while in many developing and emerging nations the issue remains basic access to the internet in order to facilitate social and political participation. In Germany there is room for improvement in digital education. In other parts of the world this topic has a different relevance as well and constitutes an important aspect of social and democratic development. Championing and strengthening the protection of human rights, especially freedom of communication and privacy in the digital age, is another big international challenge. Germany has been stepping up to its responsibilities, for instance in the form of the above-mentioned UN initiative on the right to privacy in the digital age.

Is there an area of the policy field of digitalization that is particularly important to you personally?

Yes, big data. It raises many big questions: how much predictability of human behavior do we want to admit into the discussion? To what extent can people be manipulated when algorithms use their "digital footprint" to predetermine their behavior of seeking information, consumption, and choices of doctors, jobs or partners? To what extent should and do we want to leave decisions to machines? How do we prevent human beings from being reduced to numbers? These are basic societal challenges, which we are rising to address politically. The way we answer these questions will impact our entire future world and our lives. A concrete example of this would be the question of the extent to which insurance premiums can be tied to the data

provided by mobile fitness trackers such as wristbands and smart watches, which are enjoying an increasing popularity. It is certainly desirable to create incentives for healthy living in order to save money in the healthcare system. "Health-oriented" insurance premiums can contribute to that. However, this must not lead to some groups of people no longer being able to buy insurance at affordable rates, or even at all, or to everyone being forced to constantly provide personal data.



Photo: Frank Nürnberger

Ulrich Kelber has served as Parliamentary Undersecretary at the Federal Ministry of Justice and Consumer Protection, with a focus on consumer protection, since December 2013. He has been a member of parliament since 2000 and holds a mandate by direct election to represent his home town of Bonn in the German Parliament (Bundestag). After graduating with a degree in computer science, he initially worked at the Research Institute for Basic Methodologies in Information Technology in the Society for Mathematics and Data Processing (GMD), which today is part of the Fraunhofer Institute. He then worked as a consultant on knowledge management at a small software company. Between 2005 and 2013, he was deputy head of the SPD parliamentary group, where he was responsible for coordinating the policy fields of consumer protection, food and agriculture, environment and environmental protection, nuclear safety and security, and sustainability.

conferences and meetings in order to promote an increased consideration of human and civil rights in the process of elaborating internet governance.

The interests and responsibilities of the private economy

Besides participants from civil society, companies in the private economy and their related interest groups are undoubtedly stakeholders in the administration of the internet. After all, the infrastructure of the modern internet is for the most part (and in most countries) in private hands. This holds for internet providers—in Germany, for example, Deutsche Telekom, 1&1, and Vodafone—as well as for internet giants such as Google, Facebook, and Yahoo. They all have an interest in participating in the issues of internet governance. Interest groups from the private economy are also involved in the processes of internet regulation. For instance, eco, the Association of the Internet Industry in Germany, sent its own delegates to the most recent meeting of the Internet Governance Forum in Mexico in 2016.

Private entities that are especially big or important and that, due to their economic position, have a major impact on the way the internet is used are sometimes themselves directly confronted with particular questions of internet governance. These are issues that they are spurred to solve either through their own initiative, or following interventions by the authorities in the form of court orders or antitrust resolutions. For example, in May 2014, the European Court of Justice enjoined Google to implement the so-called "right to be forgotten," i.e. to remove upon request any search results violating the right to privacy of an individual. This process requires weighing the right to privacy in a given case against the right to freedom of information for other users. Such decisions, which are of legal significance and are taken by a company belonging to the private economy (Google), fall within the field of internet regulation. After the verdict in the European Court of Justice's action against Google,

renewed calls were issued to involve relevant stakeholders in the process of weighing relevant rights, and to formalize and lend greater legitimacy to the process by means of a code of practice.

The social media network Facebook has also recently come under political pressure. Especially after the November 2016 elections in the US, which were allegedly influenced by agents of or acting for the Russian government, the algorithms used by Facebook have come under scrutiny from the perspective of national as well as international internet governance. The problem is that they enable the formation of so-called “filter bubbles” and the easy distribution of “fake news” posted for the purpose of propaganda. In response to this issue, the German Bundestag passed the so-called “Netzwerkdurchsetzungsgesetz” (Network Enforcement Law) in the summer of 2016, which is a very concrete example of internet regulation.

General international organizations

Besides the international or transnational organizations created for telecommunication in general, or the internet in particular, there are other more general international organizations that play a role in internet governance. The United Nations and the Council of Europe have already been mentioned several times. The latter has stood out especially for its creation of the Budapest Convention on Cybercrime.

The role of the United Nations

Since the beginning of the 21st century, when the momentous impact that the internet would have on civil, economic and political life had gradually become apparent, the United Nations has attempted to take a leading role in internet governance. Taking the initiative to act in this role, it organized the World Summit on the Information

Society (WSIS) in two parts—the first in Geneva in 2003, and the second in Tunis in 2005. After the first part, Kofi Annan, the then Secretary General of the UN, appointed the Working Group on Internet Governance (WGIG), which was designed to identify and clarify fundamental questions in the field and develop suggestions for possible courses of action. The results of the Working Group were discussed in Tunis, and that second part of the summit led to the founding of the Internet Governance Forum (IGF), the purpose of which is to formalize and provide continuity to the discourse around internet governance. Within the United Nations, too, questions regarding the administration of the internet arise periodically. The resolution addressing that issue, titled “The Right to Privacy in the Digital Age,” brought forward by Germany and Brazil at the General Assembly in December

2013, should be given special emphasis here. In response to the NSA scandal following revelations by the whistleblower Edward Snowden, the resolution established that the privacy of individuals on the internet is to be protected from arbitrary or other unjustified forms of government interference. As a consequence of the resolution, the UN High Commissioner for Human Rights composed a report for the purpose of exploring legal questions raised by mass surveillance by governments. That process is ongoing.

Further Examples: EU, WTO, OECD

Further international organizations to be mentioned in this context are the European Union, the Organization for Economic Co-operation and Development (OECD), and the World Trade Organization (WTO). Under the aegis of

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In our coalition treaty, we agreed that there was good reason to demand that any agencies responsible for standardization must be transparent, and that Germany should be more involved in these international organizations. We have to participate in internet governance actively in order to have an impact on IT security and innovation. Especially since the number of actors involved keeps increasing, we have to play a corresponding role.

Dorothee Bär, MP (CSU), parliamentary secretary at the Federal Ministry for Traffic and Digital Infrastructure.

The citizens. It is by no means absurd to consider citizens themselves to be relevant players when it comes to internet governance. Being users of the internet, they have an interest in the internet being administrated in their best interest and in having their rights protected. Thus, they are indeed stakeholders. However, their influence is limited. While citizens can become involved in some of the institutions mentioned above, especially those encompassing members from civil society, their participation in the process of developing regulations is always a mediate one. Allowing individuals to participate directly has often proved difficult.

“Internet governance: everyone can and should be involved”

Interview with Professor Michael Rotert, chair of the board of directors at eco – Association of the Internet Industry, and honorary professor of Computer Science at Karlsruhe College.

What are the most important topics of internet governance? What are we dealing with?

Michael Rotert: Internet governance encompasses many diverse areas. On the one hand, there are topics such as data protection—what data may be stored and for how long? There are also basic questions of access. How can we ensure that every human being has access to the internet? Within what time frame can this be done? How can we support developing countries in providing internet access to all its citizens?

On the other hand, the technical and physical level of governance is also relevant. An example of this is the question of who decides on internet design-

nations. What top-level domains are available (.com, .org, .de, .info, .biz)? Which new names are to be included, which ones deleted? Currently this gets regulated by the Internet Corporation for Assigned Names and Numbers (ICANN), a civil law, non-profit organization based in the US and overseen by the US Department of Commerce. Things don't have to stay that way, however.

What are the particularities of internet governance compared to other policy fields?

Governments should only intervene with regulations when the market is not working as it should, e.g. when certain

players in the market are systematically put at a disadvantage. In such cases regulation of the market is necessary. However, these regulations can take different forms. They don't necessarily have to be formulated as nationally-established hard laws. There are several other possibilities. One, for instance, would be self-regulation by the economy. In this approach, companies impose rules on themselves that define specific types of appropriate behavior that guide digital developments. Then there is the so-called co-regulation. This involves the state determining a specific direction of regulation, while the concrete implementation is left to the players impacted by it. This could be businesses, but also civil society, or both.



Can you give an example of successful self-regulation?

A good example would be human rights guidelines established among internet providers. In collaboration with other interest groups, internet providers have developed a protocol aiming to secure human rights online. This process was initiated by the Council of Europe. By now these guidelines have gained acceptance and can be found everywhere. Creating national regulations in this area would have been extremely difficult since there are technical aspects to be taken into consideration that limit the extent of what is feasible.

This illustrates a fundamental problem affecting legislation in this field. In the past, it has often been the case that governments would discuss regulations irrespective of technology. This resulted in approaches and laws that were neither effective nor functional. An example of this would be the debate around internet censorship. Do we need to render these processes of negotiation permanent and institutionalize them, or is it better to maintain flexible structures? Nowadays, anyone can develop and distribute a new app or service on the net. This applies to internet governance, too: all interest groups should be heard and be allowed to participate. Attempting to institutionalize these processes would accomplish the opposite. It would strengthen state solutions.

To give you an example of how this is a problem, consider the fact that different moral codes prevail in the world. Some countries are stricter than others; some demand the blocking of erotic content which we would consider harmless. There are certainly going to be national differences regarding which websites will be permitted in different locations. However, where is the limit? If nations alone can decide what can be viewed on the internet, it would be fatal for civil society.

Of course, the process of negotiating among all stakeholders is not perfect, but it points in the right direc-

tion. On the European level, and especially in Germany, there have been very positive developments in the last two years. It has now become standard for the legislative agencies to get in touch with other interest groups in good time in order to engage in a proper debate. Therefore, I am confident about the future.



Photo: eco

Michael Rotert has been an active advocate of the success of the internet in Germany through his work in various national and international organizations. He has many years of experience in the fields of information and communication technology. He has worked as a consultant at the EU, the Council of Europe, the UN, ITU, and the US Department of Commerce. Professor Rotert is the head of the board of directors at eco, the Association of the Internet Industry, and honorary spokesperson of the European Internet Service Provider Association (EuroISPA) in Brussels. His professional experience includes being the founder and CEO of Xlink, one of the first internet providers in Germany, and working as CEO at various internet service providers. He also possesses extensive academic know-how. Before starting at Xlink, Michael Rotert was employed at the University of Karlsruhe, where he was responsible for establishing the first ever internet connection at a German university in 1984.

the WTO, which was founded in 1995, the Information Technology Agreement (ITA) was created, which regulates tariffs and trade barriers of virtually all trade in IT products worldwide. This can be classified indirectly as internet governance. The General Agreement on Trade in Services (GATS), also created by the WTO, includes the regulation of cross-border trade in the area of telecommunications.

The OECD has dealt with topics in the field of internet regulation several times. For instance, the items of cyber security and the digital economy were part of the agenda of the Ministerial Meeting of this organization in Cancun, Mexico, in June 2016.

Finally, the European Union is active in various areas of the field of internet governance. For instance, as a stakeholder it dispatches its own delegation to the meetings of the Internet Governance Forum. More relevant, however, is its direct regulatory activity in the European domestic market. An important example of this is the so-called Digital Agenda for Europe, authored by the European Commission in 2010, which formulated the goal of creating a digital domestic market in Europe. This project is considered a high priority.

International Telecommunication Union (ITU)

The International Telecommunication Union, which was founded in 1865 as the International Telegraph Union, became a specialized agency of the UN in 1947 and is based in Geneva. Its responsibilities primarily encompass the technical aspects of telecommunication. This includes coordinating the assignment of radio frequencies on a global scale, instituting international cooperation regarding the orbits of telecommunication satellites, developing global technical standards, and coordinating collaboration with countries of the Global South with regard to the

The field of internet governance is currently in a state of flux. The Internet Governance Forum (IGF) of the United Nations has been extended, yet many relevant decisions are taken by the International Telecommunication Union (ITU), i.e. between countries some of which are non-democratic or authoritarian and that pursue quite different interests regarding internet regulation. A fragmentation of the successful entity called the internet must not be allowed. In order to emphasize the importance of internet governance, Germany should endeavor to host one of the meetings of the IGF soon.

Thomas Jarzombek, MP (CDU), spokesperson of the CDU/CSU parliamentary group for the Digital Agenda

extension of their communication technology infrastructure. Chinese-born Houlin Zhao has been the head of this organization since 2015.

The ITU is open to all countries and currently has 193 members. Even though private companies and organizations such as internet providers, manufacturers of technical appliances, and research organizations may also become members, the ITU follows the intergovernmental model rather than the multistakeholder one. Any members that are not countries hold only an advisory and observer status, and do not have the right to vote. Elections follow majority rule.

Since the beginning of the century, the ITU has attempted to gain a foothold in the field of internet governance. It was one of four UN agencies that organized the 2003 and 2005 World Summit on the Information Society. Nevertheless, so far the role of the ITU has mainly been limited to technical and infrastructural questions. ICANN is a much more influential player in the administration of the basic structures of the internet, while the debate around the fundamental questions of internet governance has become focused on the meetings of the IGF.

The ITU as the main agency of internet governance?

On the initiative of Russia, China, and India, concrete suggestions for changes to the founding treaty of the ITU were first proposed at the World Conference on International Telecommunications in Dubai in 2012. These included extending the mandate of the organization to include the functions previously performed by ICANN. The countries mentioned above expressed as their main argument the concern that the US would wield too much of an influence over the private organization, which is based in California. The draft of the new treaty was criticized severely not only by the Western countries and the European Parliament but also by representatives of the private economy. Google, for instance, published a statement condemning the suggestions as an attack on a free and open internet.

The above-mentioned countries again tried to achieve an extension of the responsibilities of the ITU at another ITU conference in Busan, South Korea in 2014, even trying to include topics such as the right to privacy and government surveillance. These plans were thwarted by Western nations, headed by the US, which responded to criticism by referring to the multistakeholder model that is to be implemented. Even so, this fundamental conflict cannot be considered solved at this point, and it is likely that the same initiative will appear at the next big ITU conference in 2018.

Internet Corporation for Assigned Names and Numbers (ICANN)

ICANN was founded in 1998 on the initiative of the US Department of Commerce. Its headquarters is in Los Angeles, California. It is a private non-profit organization that administrates the Domain Name System (DNS) of the internet on behalf of the Department of Commerce. The DNS is a global network of databases that records domain names and corresponding IP addresses. It has been called the telephone book of the internet.

ICANN is not subject to direct control by any government. It does not have any governmental authority either. Its regulations concerning the internet come into effect by way of civil law treaties made with other organizations, especially in countries other than the United States. As mentioned above, this organization is one of the prime examples of the multistakeholder model. Its central institution is the board of directors, which has 21 members, and which makes crucial decisions only after having negotiated with a committee composed of government representatives from 110 countries. The representatives of those countries come from the private economy, the tech community, science, and civil society.

The Future of ICANN

The US government received much criticism for wielding too much influence over ICANN by means of its contractual relationship with the organization. Therefore, it announced in March 2014 that it would abandon control over the Internet Assigned Numbers Authority (IANA)—a department of ICANN that carries out its central functions—by the fall of 2015. Simultaneously, ICANN was tasked with developing a new model of oversight and put under the obligation of using the multistakeholder model and preserving the open nature of the internet. After many rounds of difficult

negotiations, revolving mainly around the specifics of the newly created multistakeholder mechanism of control, an agreement was finally reached at the ICANN meeting in Dublin in October 2015. The transfer of the responsibilities of IANA from the US government to the global multistakeholder community was finalized on 1 October 2016. The responsibilities in question are now carried out by the newly created PTI (“Public Technical Identifiers”) department of ICANN.

Internet Governance Forum (IGF)

The Internet Governance Forum has been called the paradigm of the multistakeholder model in the field of internet governance. Founded in 2006 as a result of the World Summit on the Information Society, convened in 2003 and 2005, the IGF constitutes the first continuous and globally-oriented forum for debates involving internet governance. Part of the motivation for the UN’s founding of the IGF was to create a counterbalance to the US-based ICANN. In contrast to ICANN, however, the IGF does not have a mandate to pass binding resolutions.

The IGF meets yearly and invites representatives of governments, as well as the other stakeholders mentioned above, to participate in the debate surrounding internet regulation. Its most recent conference took place in Guadalajara, Mexico, in December 2016. The 12th meeting of the IGF will be held in Geneva, Switzerland, in December 2017.

The organizational structure of the IGF encompasses the Secretariat, which has offices in the UN headquarters in Geneva, and the Multistakeholder Advisory Group (MAG), which is responsible for preparing both the facilitation and the content of its yearly meetings. The MAG is assisted in this task, too, by the Secretariat. For this purpose, both branches convene for two days, three times per year. The MAG currently consists of 56 members and is composed

of representatives of all stakeholders. It attempts to rotate about a third of representatives from its different stakeholder groups each year.

Institutionalizing the Internet Governance Forum in Germany

Since the founding of the IGF, many regional and national forums have been founded. The German branch of the IGF, the Internet Governance Forum Germany (IGF-D), has existed as a loose structure since 2008. It promotes an open process of discussion, as required by the multistakeholder model, and convenes a yearly conference that brings together national players in the field of internet governance. Similar to international forums, its job is to maintain and

elaborate the dialogue on internet regulation, but on a national level.

Since the beginning of 2016, IGF-D has included an advisory committee and a secretariat. The advisory committee is composed of representatives from politics, science, the economy, and civil society. It advises IGF-D and promotes its work to the general public. On 17 February 2016, the committee published a letter of intent stating it endeavors to promote the open development of the internet for the benefit of all human beings. The secretariat is based in the offices of Reporters Without Borders.

More information on IGF-D can be found here:

<http://www.intgovforum-deutschland.org/igf-d-struktur.html>.

The NETmundial Initiative is another transnational platform following the multistakeholder model. It aims to provide an open forum for the debate about internet governance. It has convened only one conference so far, which took place in São Paulo in April 2014 and was attended by 1,480 stakeholders from 97 countries. The central accomplishment of this conference was the formulation of the non-binding Multistakeholder Statement, which posits a number of principles internet governance should adhere to. It also presents a road map for their implementation and for the future of internet governance. These principles include civil rights like freedom of speech, freedom of association, freedom of information and access to information, and the right to privacy. Rights concerning accessibility and development are also included. Intermediary liability limitations should be implemented in a way that is consistent with fair process, and the diversity of languages and cultures on the internet must be conserved. The internet should continue to exist as an unfragmented unity and to be safe, stable, and resistant to interference. The overarching goal is to create an environment fostering innovation and creativity. The NETmundial statement asserts that internet governance should be built on the multistakeholder model. It should be open, transparent, accountable, inclusive, and fair. Further, it should encourage meaningful participation by all stakeholders and aim for consensus. Finally, the statement expresses a preference for the use of open standards.



Discussion and outlook

In the year 2017, internet governance continues to be contested, with countries like Russia, China, India, and Saudi-Arabia favoring the intergovernmental approach, and the multistakeholder model being advocated mainly by Western and industrialized nations.

Keeping the multistakeholder model

There are very good reasons for keeping the multistakeholder model at ICANN as well as in discussion forums such as the IGF. It is the only model that can guarantee that the voices of the entire internet community are heard. Transnational decision-making processes and bottom-up ways of creating legislation correspond with the diversified structure of stakeholders of the internet. These mechanisms are better suited to serve the actual network of interests as opposed to multilateral, top-down norms and regulations imposed by governments. Investing an international organization such as the ITU with the central mandate for internet governance would pose the danger of allowing countries whose main aim is to restrict civil rights and liberties to increase their influence on the functioning of the net.

Strengthening the role of the Global South

At the same time, the concerns regarding the multistakeholder model voiced by some countries of the Global South should be taken seriously. The model presupposes that all interest groups are involved as equals. It cannot be denied, however, that thus far Western societies and their governments and representatives from civil society, the scientific community, and business have had a disproportionate influence on the decision-making processes of the

organizations and committees in question. Until a fairer balance is accomplished here, demands to strengthen the ITU will not cease, even from countries such as India which do have democratic structures and that, for the most part, ensure rights like freedom of information and freedom of speech.

Protecting Human and Civil Rights on the Net

The NSA scandal triggered by Edward Snowden has shown clearly that it is not only non-democratic or authoritarian regimes that threaten human and civil rights on the internet. Net neutrality, which is a basic precondition for the equal access of all users to information and cultural assets on the internet, has repeatedly come under pressure in Western nations as well.

As was described in the 2016 report of the Global Commission on Internet

Governance, chaired by the former Foreign Secretary of Sweden, Carl Bildt, the main goal of internet governance should be securing the unity, openness, and freedom of the entire internet. Access to the internet is a human right, hence it has to be provided to all citizens across the world. Liberties such as freedom of information and freedom of speech, as well as the right to privacy and data protection must be guaranteed globally. Any attempts by undemocratic regimes or anyone else to restrict these rights must be opposed. In addition, the internet must be secure and its underlying infrastructure stable.

In order to realize these basic principles within the currently existing forums, these forums must be inclusive to the greatest possible extent and actually involve all stakeholders. This is the only way to create necessary and legitimate legislation. A good example of such legislation is the successful transformation of IANA, the aim of which was to reorganize the basic administrative functions that ICANN performs in internet governance and decrease the disproportional influence of the US government.

In the face of the increasing impact of the internet on all areas and objects of our lives, we need binding international standards of IT security, consumer protection, and human rights. This especially requires a close cooperation between democratic nations under the rule of law, in the form of legally binding agreements, as well as cooperation with the private economy for the purpose of creating and adhering to technical standards. At the same time, the European Union must insist that the rules of the EU domestic market are also adhered to in the digital marketplace.

Jan Philipp Albrecht, Member of the European Parliament, deputy head of Internal and Judicial Affairs (Alliance 90/The Greens)

Glossary

African Union (AU): International organization based in Addis Ababa, Ethiopia, and Johannesburg, South Africa, which promotes the cooperation of the nations of Africa. All nations of the continent except Morocco are members.

Amnesty International: International NGO focused on maintaining and protecting human rights. It was founded in 1961 and is based in London.

Browser: Computer program allowing users to view pages of the World Wide Web on their devices. Web browsers serve as user interfaces for most web applications. Well-known browsers include Google Chrome, Microsoft Internet Explorer, Mozilla Firefox, and Apple Safari.

Confidence building: A term from international politics that designates measures intended to reduce tensions between countries that might otherwise pose a threat of political crises or even armed conflict.

Council of Europe: An international organization founded in 1949 which has 47 European nations as its members. It is based in Strasbourg, France. Its purpose is to coordinate the regional politics of the nations of Europe. Its foundational center lies in the European Convention on Human Rights, passed by the Council of Europe, and the European Court of Human Rights.

Cyber attack: A general term encompassing all harmful actions carried out in cyberspace by means of information technology. The motives of cybercrime can be criminal or political in nature.

Cyber or computer crime: Refers to crimes committed against, or by means of, the infrastructure of information and communications technology. The tools used to commit the crime are thus a network as well as one or more computers connected to it.

Cyber security: This term encompasses any measures intended to protect computers, networks, and other parts of the infrastructure of information and communications technology from attacks.

Cyberspace: This term is often used synonymously with the internet. However, it is to be understood more broadly as the totality of virtual space in which communication between computers or networks of computers takes place.

Digital divide: This is a term from political science that designates an economic or social inequality of access to modern information and communications technology. It can refer to the state of affairs within a particular country or between different countries on an international level.

Domain name: The part of a web address, e.g. www.fes.de, identifying it as belonging to a specific domain. Domains are administrative units in a network that can exist on different levels. The example given shows that the website of the Friedrich Ebert Foundation belongs to the top-level domain ".de," i.e. the highest level encompassing German websites.

Domain Name System (DNS): One of the core parts of the infrastructure of the internet, the main task of which is to translate domain names into IP addresses. In this way, the requests users make by typing a web address into their browser can be correlated with a unique IP address in the network.

GATS Agreement: The General Agreement on Trade in Services is an international treaty created by the World Trade Organization (WTO). It regulates cross-border trade in services and aims to liberalize it.

Geoblocking: A technology utilized on the internet to block certain content in certain geographic regions. For instance, some videos freely available on YouTube in Denmark or Poland cannot be viewed in Germany.

Hactivism: A portmanteau of "hacking" and "activism" that designates political activism carried out via computers and networks.

Human Rights Watch (HRW): An international NGO working on the protection of human and civil rights. It was founded in 1978 and is based in New York City.

Internet: A worldwide system connecting different computer networks with each other. It allows each computer connected to the internet to communicate with every other computer. The most important applications carried out over the internet are the World Wide Web as well as email and telephone services.

Internet protocol (IP): The network protocol constituting the foundation of the internet. It allows data packets from a computer connected to a network to be sent to another individual computer.

Internet provider: A company providing access to the internet for its clients.

IP address: The unique address allocated to every computer connected to the internet, based on internet protocol.

International Telecommunication Union (ITU): An international organization dealing with the technical aspects of telecommunications. It has 191 members and is a specialized agency of the United Nations. It is based in Geneva.

National Security Agency (NSA): The most important secret service of the United States, responsible for monitoring, decoding, and analyzing electronic communications worldwide. The vast extent of the surveillance it carries out was made public in 2013 via the revelations of a former employee, Edward Snowden.

Non-governmental organization: Usually abbreviated to NGO, the term refers to any civilly organized association or interest group that is concerned with political topics such as the protection of human rights or the environment. Many large NGOs are granted an advisory or observer status at the UN and other international organizations.

Organization for Economic Cooperation and Development (OECD): An international organization with 35 member countries that promotes democracy and free markets. It was founded in 1948 as the Organization for European Economic Co-operation (OEEC) and is based in Paris.

Roadmap: A term from international politics that designates a plan for a long-term political project that contains an overview of the steps necessary to reach the goal proposed.

Router: Network devices that transfer data packets between networks or between computers and networks. They are usually used to connect end devices such as personal computers or notebooks to the internet.

Switch: A device in network technology that connects different parts of a network with each other.

Think tank: A term designating institutes, usually organized independently of the state, which participate in the political process in an advisory manner by creating studies, analyses, or potential strategies that analyze and address specific social, economic, or political questions.

World Trade Organization (WTO): An international organization founded in 1994 that is the successor of GATT and deals with trade and economic policy on a global scale. It is based in Geneva.

World Intellectual Property Organization (WIPO): An international organization founded in 1967 and based in Geneva. Its function is to secure intellectual property rights worldwide. It is a specialized agency of the UN and has 188 member states.

Whistleblower: A person with access to secret information belonging to a company, organization, or state agency who publishes this information in order to expose practices considered illegal or unethical.

World Wide Web (WWW): An internet service created in 1989 by the English scientist Tim Berners-Lee, which makes available documents and other resources by means of websites connected to each other via hyperlinks. It is accessed via web browsers on users' end devices. The WWW is part of the internet, but is not identical to it.

Literature and links

Balleste, Roy: Internet Governance – Origins, Current Issues, and Future Possibilities, 2015

Betz, Joachim and Kübler, Hans-Dieter: Internet Governance – Wer regiert wie das Internet?, 2013

Centre for International Governance Innovation und Chatham House (Ed.):

Global Commission on Internet Governance – One Internet, 2016,
https://www.ourinternet.org/sites/default/files/inline-files/GCIG_Final%20Report%20-%20USB.pdf

Hofmann, Jeanette: Internet Governance: Zwischen staatlicher Autorität und privater Koordination, Internationale Politik und Gesellschaft 3/2005,
https://www.fes.de/ipg/IPG3_2005/03JHOFMANN.PDF

Hofmann, Jeannette: Multi-Stakeholderism in Internet Governance: Putting Fiction into Practice, Journal of Cyber Policy 2016, S. 29

Hofmann, Jeanette; Katzenbach, Christian and Gollatz, Kirsten: Between Coordination and Regulation: Finding the Governance in Internet Governance, New Media & Society 2016

Kleinwächter, Wolfgang: Gibt die US-Regierung die Aufsicht über den Internet Root ab?, 2015, <http://www.heise.de/tp/druck/mb/artikel/43/43887/1.html>

Kleinwächter, Wolfgang: Internet Governance: Rückblick 2015 und Ausblick 2016, 2016, <http://www.heise.de/tp/druck/mb/artikel/47/47139/1.html>

Kurbalija, Jovan: An Introduction to Internet Governance, 6. Edition 2014

Maas, Heiko: Internet-Charta: Unsere digitalen Grundrechte, 2015,
<http://www.zeit.de/2015/50/internet-charta-grundrechte-datensicherheit>

Masters, Jonathan: What Is Internet Governance?, 2014,
<http://www.cfr.org/internet-policy/internet-governance/p32843>

NETmundial (Hg.): NETmundial Multistakeholder Statement, 2014, <http://netmundial.br/wp-content/uploads/2014/04/NETmundial-Multistakeholder-Document.pdf>

Weber, Rolf H.: Proliferation of „Internet Governance“, 2014,
<http://ssrn.com/abstract=2809874>

Further information on the internet

African Union (AU):

<http://www.au.int>

Amnesty International:

<http://www.amnesty.de>

Council of Europe, COE:

<http://www.coe.int/de>

Freedom on the Net:

<https://freedomhouse.org/report-types/freedom-net>

GATS Agreement:

<https://www.bmz.de/de/themen/welthandel/welthandelssystem/GATS.html>

Human Rights Watch (HRW):

<https://www.hrw.org/de>

International Telecommunication Union (ITU):

<http://www.itu.int/en>

Internet Corporation for Assigned Names and Numbers (ICANN):

<https://www.icann.org>

Internet Governance Forum (IGF):

<http://www.intgovforum.org>

Internet Governance Forum Germany (IGF-D):

<http://www.intgovforum-deutschland.org>

Multistakeholder Advisory Group (MAG):

<http://www.intgovforum.org/cms/mag>

National Security Agency (NSA):

<https://www.nsa.gov>

NETmundial Initiative:

<https://www.netmundial.org>

Organization for Economic Cooperation and Development (OECD):

<http://www.oecd.org>

World Trade Organization (WTO):

<https://www.wto.org>

World Intellectual Property Organization (WIPO):

<http://www.wipo.int>

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Photo: Henning Lahmann

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Photo: Bettina Volke

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Photo: Dirk Dunkelberg

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Photo: Valie Djordjevic

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