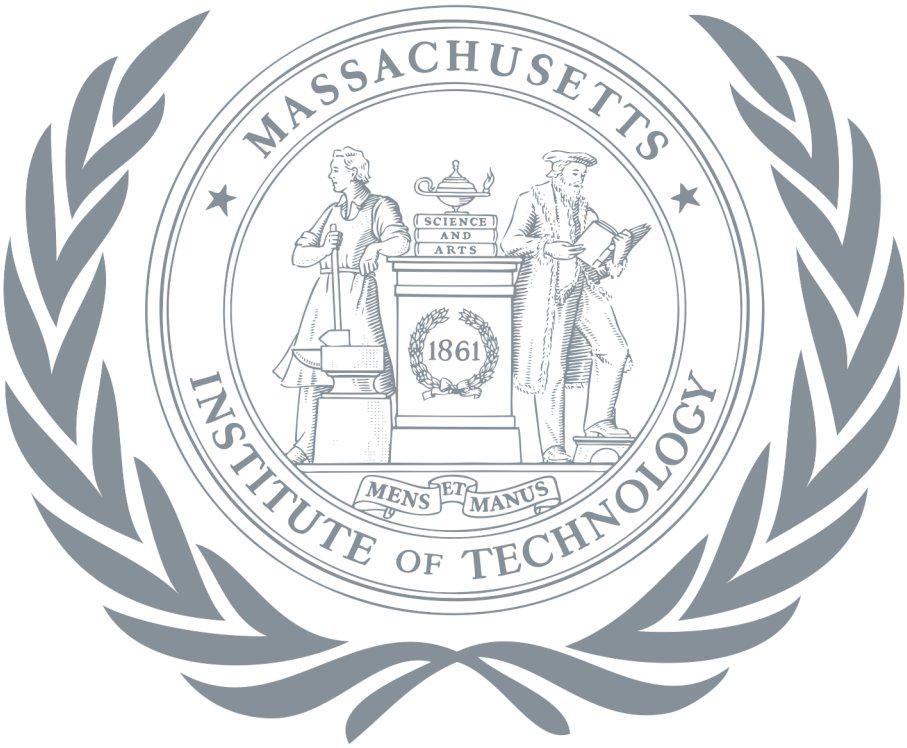

ITU

MITMUNC 2014

Greeting, delegates, and welcome to the International Telecommunication Union (ITU) at MIT's Model United Nations Conference 2014!

Over the three days of MITMUNC, you will discuss various aspects of Internet regulation, from changing the Multistakeholder Model of Internet governance to giving individual nations greater control over their pieces of the Internet. You will be expected to determine a course of action in your country's best interests, eloquently describe it to the other delegates, and convince them that it is in their best interests too. In order to prepare, you should read about the topics that will be discussed, and to help start your research we have written short background guides. Before you read them, however, we would like to introduce ourselves.

Marcus Boorstin, your chair, is a freshman intending to double major in Computer Science and Mathematics. He grew up outside of Washington, D.C., and attended Georgetown Day School from 3rd through 12th grade. He greatly enjoyed participating in Model UN in high school: his favorite committee was a joint historical crisis simulating Sino-Soviet relations in the 1960's. Besides Model UN, his other interests include programming computers and Arduinos, playing the piano, building UAV's (unmanned aerial vehicles), and playing League of Legends.

Shannon Kao, your co-chair, is a junior majoring in Computer Science with a concentration in graphics. She attended an international school in Tianjin China, and had a lot of fun participating in THIMUN Singapore's ICJ committee. Outside of Model UN, she enjoys drawing, working in Flash and watching Doctor Who (and Parks and Recreation, and Community—to name a few)!

If you have any questions before the conference, please feel free to contact us at itu2014@mitmunc.org, and we look forwards to seeing you in February.

Sincerely,

Marcus Boorstin

and

Shannon Kao

Increased Individualized Government Control of the Internet

This background guide will cover a brief history of internet governance, following the development of the internet from its relatively open inception and a period of individualized control to increasing government control primarily through the United States. It will then cover more recent developments through the lens of the United Nations, addressing the Budapest Convention and the World Summit on Information Society.
Key issues to consider are:

- The balance between the private sector and the government.
- Issues of cyber-crime and internet regulation for individual states.
- Issues of international relations in the space of the internet.
- Methods of internet regulation and means of implementation.

Technical Knowledge

This topic is more political than technical in nature, and delegates should certainly focus more on the governmental aspects of regulation than the intricacies of how such regulation is executed. Technical knowledge may help your resolution in terms of both credibility and practical applicability, but it is not necessary for this topic. We will endeavor to define key terms as they are used in the guide as there will naturally be some technical aspects in both the history of internet development and the methods of governmental control.

History of Government Control

1960s-2000s Origins of the Internet

The internet was initially a United States Defense Advanced Research Projects Agency (DARPA) commissioned system of communications. Research by Robert Kahn and Vinton Cerf at Stanford University allowed the open sector of the Internet to split from the military network around 1990. Initially, there was a notion of "cyberspace" when dealing with the Internet—a physical space outside of geopolitical boundaries, that led to an extremely difficult-to-regulate system.

2000-2005 Increasing Control

As the Internet was quickly becoming an international open space, governments scrambled to regulate the material that their citizens had access to. China and Saudi Arabia were among the first to erect filters, blocking out information that they did not want people to view. (Deibert et al. 2008 and 2010). Internet filtering rapidly caught on, though, and the number of states utilizing some kind of internet filter has grown, along with the scale and sophistication of such filters.
Further, it became vital to consider how international relations and inter-state transactions would be regulated in cyberspace. (Goldsmith 2003) Given that a government body could have considerable control over a region of the internet, it was crucial to discuss what measure of control each individual

government would have over a space that was still primarily undefined.

2005-2010 Internet Regulation

With Internet filters already commonplace, governments turned towards surveillance instead of blockage. Along with regulation of content exchange internationally, states saw the Internet's potential as another arm of law enforcement or a means of regulating citizens' activity in in-state environments. However, the scope of this type of surveillance was largely outside of governments' abilities, which led to pressure on private parties and corporations. The most obvious example of this is China's demands on Google and Yahoo! to pass along information in the companies' possession.

Internet service providers and private organizations control much of the information and activity on the internet, and states rely heavily on these organizations to implement government regulation of the Internet, making it a necessity to negotiate cooperation between these parties.

Modern Day Developments

Governments versus the Private Sector

What was originally considered "cyberspace" is rapidly becoming inseparable from the physical world; Internet usage has become so widespread and so versatile that it is absolutely necessary to regulate it in some manner.

The World Summit on Information Society (WSIS) defined Internet governance as follows:

A working definition of Internet governance is the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet.

They further stated that:

The international management of the Internet should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations.

The Internet is a unique space in that the participants—individuals and private organizations—often have a vital role in its regulation, and it is difficult to address the balance between government and private governance. It has been suggested that the best mode of control is a blend of public and private regulation (Palfrey and Zittrain, in Deibert et al. 2008: 103–122; Maclay, in Deibert et al. 2010: 87–108).

There are issues with both private sectors and other states contesting state rights with regard to censorship and control. The Global Network Initiative, an organization founded by non-governmental parties such as Google, Microsoft and Yahoo! is dedicated to preventing government censorship of the Internet.

Governments versus Governments

Further, the Internet has become a strategic zone for individual states. With the growth of cybercrime, there are political and military ramifications to Internet regulation. Consider, for example, the ILOVEYOU virus written by two Filipino programmers. Despite the billions of dollars in damages, all charges were dropped against the two

instigators, since there were no laws in place, at the time, dealing with virus-writing.
The Budapest Convention, also known as the Convention on Cybercrime, was the first international treaty to address the issues of cybercrime. The convention has currently been signed by Canada, Japan, the United States, and the Republic of South Africa, Australia, the Dominican Republic, Japan, and Mauritius. It requires signatory states to implement measures of dealing with cybercrime issues relating to pornography, illegal access, and misuse of devices, among others.

Modes of Regulation

State-to-individual regulation:

States regulate an individual's access of content and material on the Internet. States can further monitor an individual's activity and utilize this information for legal purposes. Methods of regulation include blocking certain sites or topics within a nation's borders, as well as surveillance through third-party sites.

State-to-corporation regulation:

States regulate private companies in their own territory. E-commerce regulation and international transactions could fall under this category.

State-to-state regulation:

States monitor other states' activities within national boundaries. International relations is becoming increasingly applicable to Internet activity, and inter-state behavior is certainly an area of legislature that deserves consideration.

Country Blocs

Countries with High Governmental Control

Countries: China, Saudi Arabia, Syria, Iran, North Korea
These states all have a very high level of government censorship when it comes to the Internet. None of them have signed the Budapest Convention, and most execute extremely strict control of Internet access. They have been the subject of criticism from other states on the topic of Internet control and regulation.

Countries with Lower Governmental Control

Countries: Singapore, Canada, Israel, United States
These states have a very low level of Internet censorship. The private sector, in these states, has a larger stake in Internet activity, and controls significant portions of the Internet. They are considerably more open in terms of data and information available to individuals, on the Internet.

Additional Resources

http://www.itu.int/wsis/index.html
The WSIS world summit on information society
http://www.itu.int/en/wcit-12/Pages/default.aspx
ITU World Conference on International Telecommunications
http://conventions.coe.int/Treaty/en/Treaties/Html/185.htm

The Budapest Convention, or Convention on Cybercrime
http://www.osce.org/fom/26169
Internet Governance from the Organization of Security and Co-operation in Europe

https://opennet.net/research/data
The OpenNet Initiative holds information on Internet censorship and filtering from a large number of states

Changing the Multi-stakeholder Model

The original architects of the Internet could not have envisioned its wild success. The first message was sent over ARPANET in 1969; and in less than half a century the Internet has revolutionized communications, commerce, politics, entertainment, and nearly every other aspect of life. Its governance, however, has not kept pace. It began life as a Department of Defense research project, and as such it seemed logical that the U.S. government would have control over it. As the Internet grew, this setup changed little, except for the creation of various agencies tasked with its running. Hence the "Multistakeholder Model" in use today was formed, in which those agencies make decisions based on informal consultation with all interested parties but ultimately answer to the U.S. government. However, the Internet has now become a truly global entity, and many nations are dissatisfied with what they see as the United States' unilateral control over what they consider to be an international resource. The International Telecommunication Union (ITU), created to promote international cooperation with regards to all forms of communication technologies, is a natural forum for the discussion of these concerns;.

Technical Expectations

MITMUNC 2014 is a Model United Nations conference, not a hackathon. As such, discussion should be at a level, both in style and content, appropriate to a high-level meeting of diplomats writing a treaty. Hence this committee will focus on countries' positions on Internet governance and the effects the decisions of this body may cause, not how best to implement them: there will be no code writing, and discussion will be prevented from devolving into an argument about computer science. However, necessary for any effective discussion of the Internet is a basic grasp of some of its underlying standards and protocols, for without such knowledge it is impossible to understand, much less offer solutions to, any problems currently facing it. As a result, delegates with little computer science experience are encouraged to learn at least a little about the basic functioning of the Internet. Delegates with a question during a committee session may also ask their "technical advisors" questions by sending a note to the dais. Finally, to assist delegates, basic outlines of two extremely important protocols are given below.

Two Critical Protocols

IP: Internet Protocol

The basic system of communication on the Internet is called the Internet Protocol (IP). When a node (computer, cell phone, router, or other device) is connected to the Internet, it is assigned a number, called an IP address. Under the most common version, IP version 4, these numbers were 32 bits long and expressed in decimal form: for instance, 18.111.25.246. As a result of the growth of the Internet, IPv4 addresses ran out, and are slowly being replaced with 128 bit IPv6 addresses, such as fe80::8ea9:82ff:fe12:c2ec. When a node wishes to send data to another computer, it

marks the data it wishes to send with the source and destination IP addresses, and the data is then routed to its destination (possibly passing through many different nodes, each with their own IP address). Because these IP addresses must obviously be unique, it is important that they be distributed from some central authority which keeps a master record of which addresses have been allocated and which are free. Today, that central authority is the Internet Assigned Numbers Authority (IANA), a division of the Internet Corporation for Assigned Names and Numbers (ICANN), a non-profit entity based in the US. IANA then distributes large blocks of IP addresses to the five Regional Internet Registries (RIRs), which then further distribute IP addresses as needed. Of course, from the perspective of many countries, this is a frustratingly U.S.-centered approach.

DNS: Domain Name System

When a user wishes to access a website, they do not give an IP address to their web browser; rather, they simply type in a domain name, such as www.google.com. The system used to translate between these domain names and the IP addresses needed to access them is the Domain Name System (DNS). DNS consists of servers which list the IP addresses associated to each domain name, and return the appropriate IP address when queried. More specifically, DNS is organized into a series of top level domains, like .com or .edu, as well as country-specific domains, like .uk. ICANN delegates management of these domains to appropriate entities (foreign governments are given control over their respective domains), but ICANN controls the root DNS domain and must follow orders given by the U. S. Department of Commerce. New top level domains must be approved by ICANN (it is usually extremely slow to do so), and it therefore effectively dictates what changes can be made to DNS: for example, it has only just begun the process of allowing non-Latin characters in top-level domains. Thus, problems such as these have prompted many countries to call for a change to the Multistakeholder Model.

The Multistakeholder Model

The Multistakeholder Model is the central element of the current governance of the Internet. Essentially, it is governance by consensus: when an issue arises, all concerned parties (governments, Internet companies, individuals, etc.) informally find, discuss, and implement a solution. One of its greatest strengths is that it very accurately reflects the nature of the Internet, and indeed the world of computers as a whole, since the basic standards that underlie the Internet were gradually adopted by people who found they worked well, not because they were ordered to by some international body. However, sometimes contentious decisions do need to be made, and as discussed above, ICANN and other similar bodies fulfill this need by having final authority over various systems (such as IP address distribution and regulating character encoding). Because the Internet was originally invented in the United States and owned by the government, these agencies are based in the United States and maintain relations with the government: indeed, most were created and given their powers by Congress, and through them both Congress and various executive departments retain some degree of control over the

Internet. It must be reiterated that ICANN does not create standards (that is the domain of organizations like the International Organization for Standardization, which is truly international); it simply runs the basic architecture of the Internet, but many countries view the Multistakeholder Model as unacceptably United States-centric.

Dubai: A New Model?

To settle, or at least discuss, many of the concerns regarding the Multistakeholder Model, in December 2012 the ITU convened The World Conference on International Telecommunications 2012 (WCIT-12) in Dubai, United Arab Emirates. This meeting, the thinking went, would allow all countries, not just large and influential ones, a forum to offer their plans on how best to govern the Internet, and would hopefully lead to real agreement. But there was trouble from the start. A draft document was circulated in August that seemed to greatly expand the ability of all countries to monitor, censor, and even shut down the Internet. During the conference many proposals were raised that would create a vast United Nations-controlled regulatory system for the Internet, and many parts of the draft were seriously considered. In response, the United States House of Representatives passed a resolution flatly opposing the proposed changes and claiming that they would utterly destroy the free and open nature of the Internet. Other interested parties (such as Google) also condemned the conference. Many nations would only offer small concessions and then withdraw them when their larger demands were not met: hence there was little opportunity to compromise. The final resolution (specifically an update to the International Telecommunication Regulations) was signed by only 89 out of 152 countries, and most Western nations (including the United States) refused to do so. Thus, the main accomplishment of WCIT-12 was simply to lay bare the deep divisions in the international community.

Possible Solutions

As WCIT-12 did not produce a coherent, realistic, and widely acceptable resolution, the ITU has convened to try again. All delegates, regardless of their national origin, face the fundamental problem of building a system of governance for a system that by its very nature is uniquely ungovernable. The default solution is to continue with the Multistakeholder Model, in which organizations in the United States tasked with running the Internet informally consult with various interested parties before making decisions. One change might be to change the governance of ICANN to make it admit greater international participation, such as giving the Governmental Advisory Committee a greater role in ICANN's decision making-process, or even giving the GAC formal and enumerated powers. The most drastic option would completely dissolve ICANN and reincorporate its powers into the ITU (which is under the control of the U.N. General Assembly). However, as all of these options are straightforward devolutions from the United States, more creative solutions, such as giving regional bodies like RIR's more power, might be more tenable. In short, the best answer is simply that which can garner support from all pieces of the international community.

Bloc Positions

United States

The United States, as the main promoter of the Multistakeholder Model and the country where ICANN and its divisions such as IANA) are based, is satisfied with the current model of Internet governance. It benefits greatly from this model and is able to loosely guide the further development of the Internet. Additionally, much of the United States' economy (for instance, Silicon Valley) is dependent upon the Internet continuing to allow free and easy innovation without interference from other countries. Hence the United States has everything to lose from serious change, and very little to gain. As a result, should this meeting produce a resolution extremely unfavorable to the United States, it may simply walk out and ignore the ITU, although this would obviously be extremely embarrassing for all parties involved.

The European Union and the West

Nations of the European Union, and other western countries, do not directly control the Internet but their interests are generally aligned with the U.S. and they usually benefit from its decisions. Because many of these countries were early adopters of the Internet they are well adjusted to the current system of Internet governance, and as a result (and because of their close relations with the U.S.) many have received preferential treatment: for instance, the Department of Work and Pensions of the United Kingdom owns the entire 51.0.0.0/8 block of IPv4 addresses. Moreover, many of these nations are keenly aware of the changes to the Internet the international community might make given the opportunity, and can be nearly certain these changes will be disadvantageous to the West. Therefore they may be expected to support the United States in preserving the status quo.

Russia and China

Russia and the People's Republic of China are large and authoritarian countries that have long chafed at the United States government's ability to dictate global Internet policy. The Internet has shown itself to be a wonderful tool for dissidents, and these nations therefore seek greater ability to modify their national Internets as an aid to their internal security forces: the general "openness" of the Internet's architecture and protocols usually make this extremely difficult (for example, even though China has spent years building a "Great Firewall", it is fairly porous and easily passable through use of technologies such as VPN's and proxy servers). Also, these countries view the United States' control over the Internet as an affront to their national pride, and (rightly) believe that devolution away from the United States would further erode the United States' soft power. Finally, by presenting themselves as the underdogs, they gain the sympathies of small developing nations that view the Multistakeholder Model as too biased towards large, rich countries. In sum, China and Russia may be expected to constantly make life difficult for the United States at the ITU.

Other Nations

The views of most other nations can be considered to a blend of the various positions described above. On the one hand, nearly all would prefer greater control over the Internet, for the same reasons Russia and China do: economist gain and political benefits. Many authoritarian countries have also watched the Arab Spring with great discomfort, as they have seen how easily revolutions can be created via the Internet, and they presumably have noted the difficulty embattled regimes have had in quickly shutting down Internet access. On the other hand, few countries realistically believe that the United Nations will be able to govern the Internet with the same degree of competence and flexibility the United States has shown, and they might even be concerned by the potential changes the Internet would undergo. Finally, these smaller nations are keenly aware of the possibility that their voices would be drowned out by larger nations in any form of international governance. Thus, these countries will be forced to find solutions that balance their many competing interests.

Questions to Consider

- Has your country generally benefited from the Multistakeholder Model, or would it prefer a change?
- How hard is your country willing to fight for its views, and what will be the diplomatic consequences?
- How will different possible resolutions affect your country's economy?
- Is your solution technically feasible? For instance, rebuilding the entire Internet is not a reasonable solution.
- Is your solution sustainable over the long term and able to deal with a changing Internet?

Further Reading

- General ITU Website: http://www.itu.int
- Public draft circulated prior to WCIT-12: http://www.itu.int/en/wcit-12/Documents/draft-future-itrs-public.pdf
- Final WCIT-12 resolution: http://www.itu.int/en/wcit-12/Documents/final-acts-wcit-12.pdf
- Babbage (The Economist's technology blog) on WCIT-12: http://www.economist.com/blogs/babbage/2012/12/internet-regulation
- Another Economist article on regulation: http://www.economist.com/news/21567340-governments-squabble-over-new-rules-internet-system-error