***

***

   >> VIDUSHI MARDA: Good afternoon and thank you for joining us. The title of this panel is Pervasive Technologies Access to Knowledge in the Marketplace. And we will discuss the research findings that came out of a three-year collaboration between the Center for Internet in India and Beijing Normal University in China. So when we say pervasive technologies we refer to mass marketed communication technologies. More specifically in our context U.S. mobile phones. And the idea behind this project was to identify the different intellectual property forms. Both economies have had a lot of transformation in the way that knowledge is shared and also accessed.
   So I'm Vidushi Marda. And I am the program officer at the Centre for Internet & Society. We are hoping to have short presentations from our each of the panelists, between five and seven minutes and after which we are hoping to make it an interactive discussion where you can challenge our research findings or feel free to ask us more questions about the methodologies and why we decided certain approaches and why we decided to not go with others.
   The first person I turn to is Phet Sayo whose organization actually funded the project to give us a sense of thinking behind why this

project was something that we found interesting to fund and what your objectives were.

>> PHET SAYO: Thank you. First let me thank the organizers for organizing and letting us organize the panel here. My name is Phet Sayo. I'm a senior program officer at the International Development Research Center. We have three main program areas that we fund in agricultural environment, governance and justice and science and technology. I sit in the science and technology field particularly looking at networked economies.

I will give a little plug to my organization and where we are because I guess we can. The goal in networked economies is to harness digital innovations. That's our mission statement as a team. What we really want to do in terms of our goals is to test and scale digital innovation, to improve entrepreneurship education and democracy. Our second goal is to connect the next billion to economic opportunities. And our third goal is to improve governance of cyberspace. This line of work that we help support fits in to connecting the next billion to economic opportunities. Vidushi mentioned the term pervasive. Remember this discussion with Sunil and company were years in the making. When we were first thinking about the term was pervasive network communication technology, what a mouthful. And I think the statement we had was pervasive network communication technologies are transforming the way that people get communication.

The prices of Netbooks have plummeted. Even at a time we couldn't put a finger on the trend. We knew it was about mobile devices. But couldn't figure out what was going to be. And hindsight is 20/20. Mobile phones is where it is and that's where most people do connectivity. So whatever the goals and principles in which why we were interested in project and funding the research? I think the principle comes down to this matter that in sort of the ecosystem of access that we are really for digital pluralism and digital diversity. That was the driving force in looking at the research and the goal was to lower the cost of access on the user side.

We find other work that looks on sort of the supply side and on the telecom or communication policies but we haven't done any work on looking at the device side. What is the diverse or pluralistic ecosystem of devices and how can we sort of spur on the lowering of cost which is already lowering down. I was going to mention something about the results and the research work, but I think I will leave it to the researchers that have really dealt with it in India and China.

Just to say that for us in -- I'm based in New Delhi and I find that this project is quite significant given the current context in the Indian Government in their sort of aspirations for making India, sort of general strategy of the Government which is to promote manufacturing, promote production for domestic consumption first and also export. We know the history of India and how this sort of generic

drug movement -- I'll let the speakers talk about this.

   But the analogy I want you to think about in going forward and what people are talking here, it is sort of allowing for compulsory licensing, patenting, pooling and generic drugs. We imagine the same sort of opportunities with mobile devices. Could it be possible that India could become sort of a manufacturing hub and -- but for that to happen what sort of conditions, what are sort of the knowledge base we need. Funding this project was the first step for us towards that. So can I leave that for now? Thank you very much.

       >> VIDUSHI MARDA: Thanks for that great overview. I now hand over the mic to Sunil Abraham who is the executive director at the Centre for Internet & Society. And he also managed this project very closely.

       >> SUNIL ABRAHAM: Thanks. I have only six minutes and I am supposed to take you through four chapters that were developed over a period of three years. So it is going to be very difficult to do that in any way comprehensively. So I'm going to just show you some snapshots from each chapter. And for the fourth chapter I am going to burden out the Chair and ask her to present her own chapter because it is a bit odd to have the chapter author here on the table and then for me to present the work that she has done. So I'm going to ask her to present the fourth chapter. Sorry, professor.

       >> (Off microphone)
  (Laughter).
       >> (Off microphone).
       >> SUNIL ABRAHAM: No. I think the opportunity really is to have a discussion and to learn from the expertise in the room. So you will completely agree with me. You have made that point at least twice so far at sessions that I have attended. So I don't want you to stand up again and to shout at me here. Sir, I'm going to avoid the instruction from the donor and listen to the audience, if I can be forgiven for that. Thank you.

   So these are the organizations that have been collaborating on the project. Vidushi has already told you this and the donor is listed below. And these are the four Indian chapters. What we have tried to do is look at hardware, software and content through the lens of copyright law, patent law, and competition law. And we have done that more or less equally across the Chinese team and the Indian team. Although we haven't tried to standardize any methodology because both the countries are so very different and the legal system and history is all very different. So each chapter has its own unique methodology. It is not a comparative research project. So -- and also the entire project is not aiming to be comprehensive because it is impossible to be comprehensive about such a large area.

   So what we really done is zoomed in to some interesting aspects of this policy space. So we have Rohini Lakshane who did a patent landscaping for the hardware, the mobile device. We have Anubha Sinha

who interviewed a series of mobile phone app developers and tried to understand what they thought mostly about copyright law. Then we had Maggie Huang and Amber Kak who looked at the content player, a particular type of content. And finally back to the hardware layer, and as you know there are more than 150 standards in a mobile phone and some of these standards, one of them could have 5,000 or 6,000 patents associated with a single standard. So those patents associated with the standard is called a standard essential patent. And we tried to see how does competition law and patent -- and patent law play off against each other. How do these actors try and resolve these tensions. So this is just a quick summary of the patent landscaping exercise. As you can see the big rightsholders are actively registering their patents in India.

So what you could say very clearly is just as we have mobile patent wars globally we are going to have mobile patent wars in India. Mostly between Ericsson which is the second largest holder of patents and Indian resellers of Chinese manufactured phones because India still does not manufacture phones. But Indian marketing organizations go to China, source the phones, rebrand them and sell them in India. So we can say that the problem of the gridlock market or the gridlock economy is going to recur in India where excessive property rights prevents the market from functioning properly. This is part of the flexibility available in the copyright law which is if a patent holder does not work the patent within a jurisdiction then the Government can issue a compulsory license. That means if you have registered a patent, mostly to block the production of that invention in India then the Government can say no, we are going to allow a Indian manufacturer to make this. You can see over the years the orange line or orange bar represents the forms that should have been filed. But you see the blue bar representing the forms that are actually being filed around these patents.

So when it comes to mobile patents the rightsholders are not filing these mandatory disclosures because they don't want to know how their -- the competition doesn't want to know how they are licensing the patents and so on. The system is broken. The system, the government has put in place to temper the monopoly powers is no longer working any more. After the next chapter and this is the chapter on -- where we interviewed phone app developers and we talked to all the different exceptions and limitations in copyright law to see if they are taking advantage of the flexibilities offered by copyright law.

And the exception that they seem to most know or use directly is the exception for reverse engineering. So Indian copyright law is very balanced in that sense that you can legally reverse engineer competing software for the purposes of interoperability for the purposes of compatibility or even to do a security audit. The first bullet point gives you the list of reasons that they have told us

for reverse engineering it but they understand reverse engineering differently. Some of them think that breaking in to private databases is also reverse engineering which is not permitted under Indian copyright law. And what we noticed is the fear that rightsholders have is that reverse engineering is usually used to steal IP is true.

   Indian software is not protected with patent law unlike the U.S. jurisdiction where software has triple protection under trade secret law, under copyright law. It is protected under trade secret and then copyright. So they don't steal the code and they are a bit worried about the risks because they don't fully understand the law. There is a need for us to tell the software developing company what their rights are under the copyright law.

   So I will skip now to the next chapter, the third chapter. This is the chapter on music. The main business model, all sorts of interesting business models including pirate business models. You can go to a pirate shop and buy a memory card and pop it in to your phone. The legal market also provided other business models like downloads and so on. Now everything is going towards streaming. But it is mostly capital dumping and nobody is making any profit. It is not a good, healthy industry. The prices are at the same level as the pirate prices because they are competing with the pirate. Everyone is blaming one another.

   All the different stakeholders, there are about eight, nine different stakeholders in a complex supply chain. Very little add related to revenue on streaming platforms. And the most important stakeholder the musicians are making almost no money. And they make very little money when there is reuse of their works. Suppose they told it in the initial download context and later the service shifted to streaming them and they make no money from the streaming thing. There is a massive collective action crises and key institutions like collecting societies are not working properly. They are refusing to adhere to the changed law. And they mostly have meetings in a beach resort and they divide up the revenues amongst the top biggest players. If you are on the long tail you get almost nothing. So over to Vidushi to talk about her chapter.

        >> VIDUSHI MARDA: Thanks. As Sunil mentioned a little earlier we have about 14 cases in the Delhi high court that look at standard patents and the competition law angle with respect to them. And the intention behind this particular issue and try to understand the issues that they have thrown up. But not understand them in terms of what the courts think but because of the tension of competition law and patent law, trying to understand how the competition regulator and the courts interact with each other. And what kind of clarity exists. And mainly research finding is very little clarity exists because the roles of the regulators, the courts and the Governments is very ill- defined. So, for example, the first big case that we had was when Ericsson sued Micromax which is an Indian homegrown mobile

phone company. Both of them went to court and the court had a particular finding which was that they wanted -- they gave them an interim injunction. And then they said okay, we need to wait to see what happens after this. But in the meanwhile people went to the competition regulator and then there was a parallel process. But there is no harmony between the two processes which has been one of the main problems with getting any sort of clarity with respect to essential patents in India.

   Another finding was that with respect to the laws itself that govern standard essential patents, there is no specific provision that talks about these particular patents. And so the question of whether we need specific law, whether existing laws are enough or not is also something that needs to be answered by the courts.

   And another interesting finding was that Indians -- sorry. Indians have very little participation in standard setting organizations. And when they do participate in them they are looking to develop global norms that have no context in India, which we are constantly confused about not only where to go but which laws apply, which standards do we apply to specific cases and whether there is a coherent line of precedent which we don't have at the moment.

   So I'm going to stop with that and I'm -- we will be taking more questions that you may have with respect to methodology and stuff like that later. And now passing the mic to Professor Hong who will be talking about the Chinese chapters, the four Chinese chapters that will be part of our book as well.

      >> HONG XUE: Thank you very much. Internet is a new term. It is a chink dia. When they suggested we do this collaborative research, this very good idea, the two most populous communities in the world need to know each other better, legally, socially, economically. I guess it would be an interesting project, saying that we have 5 minutes and 49 seconds. I am going to speed up and part of me, if I have jumped to conclusions because we also have four chapters and now in Chinese going to be translated in to English, to respond to Professor Wu's request I'm not going to use slides. No slides. Oral presentation.

   Yes. We have four chapters. If you want to know all the details you are welcome to download a copy or buy a book. And I'm only going to give you a very brief summary. But in China probably you heard about our national strategy to develop -- from then on the Internet has been deemed as the cross-cutting element to digitize the whole economy. So it seems that there is an Internet has really become the key word in the whole economy in China and this new powerhouse of new normal of Chinese economy. According to the most recent statistics and you can have a guess of how many Chinese Internet users right now up to the end of 2016, by the end of last year China more than 731 million Internet users but that's only half of the population which means the penetration rate is only 55%. So China still have the great potential to have more Internet users. We are talking about

to connect the next billion. So I guess a large part of the next billion will be coming from China. It was even more interesting that according to the latest survey more than 95% of Chinese Internet users are actually mobile Internet users. Well, that's very impressive.

   So in the future I guess it will be 100% of users or mobile Internet users. So I guess the mobile Internet is really the future. It is not the future. It is right now. It is happening. And you can see from the sky train station or metro station here in Bangkok all the logos of Chinese mobile phones, Opo, Huawei, MI, yes, everywhere. Very successful overseas market. And this mobile Internet is not only the hardware that's involved, the software, the communication platform, the telecom network and, of course, the users is really an ecosystem. It involves many, many legal issues such as consumer protection, the data flow. And yesterday we talked about the electronic identity management. I guess mobile industry have great potential for this EID management. Well, I hope the gentleman from the GSM is still here. He could give good feedback on our research on that. But today we will be focusing on intellectual property issues. How to enable people to access knowledge and to stimulate innovation in the knowledge production.

   Our four chapters are in the following sequence. The first one is on apps and apps for mobile phones. And for this part we have narrowly researched those mobile apps operating on your phone for these apps. We believe they are a good combination of hardware and software. They have to be loaded in to the phone. And the good combination of contents as well as the means of delivery of contents.

   It involved really a multi-stakeholder ecosystem, the hardware producer, the app developer, app itself is a program. So that's the software part. And also we see some very interesting intermediary in between that. We call them market or platform. Like the app store, the most typical one or Google store, the use of platform services. And, of course, there is users. We look at their copyright risk and copyright concerns in China and in our national copyright law. We have a dual liability system for direct liability and intermediary liability. And we have some safe harbor for the intermediaries like the app store. This e-platform for delivery of the apps. That's not stuff. And the liability rules are kind of ambiguous. It is not very clear and also we don't have the open limitation and exception like they produced. And for the hardware producer they also have some concern. There is some preinstallation of apps has become quite popular in China. Prestored hardware could contain the infringing components that could later on become a copyright bomb hurting them in market in lawsuits.

   The second chapter is about the contents of the mobile Internet. It is primarily the contents of audio, video contents. For this chapter we do not only look at the communication of the audio video contents through apps but also through websites and through the other

means, like the social media. For the audio video contents chapter, we are not looking at liability anymore. Instead we look at the transactional model. What is the new businesses to enable people to gather access to this work. Under the copyright law we say how did you get the license to access these works for free or more payments. And our law we have statutory licenses which means the law permits you to access. You can pay for access for free. And we have the business model for voluntary licensing. These are the business operators. Well, they have to follow certain rules. For example, if there -- really this is a very big platform for copyright transaction, whether they should maintain a kind of reasonable and nondiscriminative policy for licensing to enable all the copyright providers to access a service and enable all the people to acquire the license through their platform.

And in China recently we are amending our copyright law. I heard that China is going to introduce the so-called extended collective management. That's kind of a learning from the Nordic country. It means that we want to extend the collective management. Collective management is another legal design. Is through the CMO, collective management organization. They are a national institution sanctioned by the Governments. Now it seems even without authorization of copyright owner these CMOs will be able to manage certain types of copyrights on the Internet. Best to kind of extend their monopoly of businesses in order to enhance the efficiency and advocacy of this online licensing model. We are aware of that. That one to one licensing in the traditional way in offline environment is not working well on the Internet. We need a new, more effective licensing model to enable the large scale licensing.

Okay. I'll go to the last two chapters -- is my time up? The last two chapters on patents but from a different perspective. One is on patent infringement. We see some trends in China's patent disputes. There is -- when we talk about patent infringement when you think Chinese companies is being sued by multiple companies. According to our empirical research we don't see this in those case studies. More patent disputes are between the Chinese companies and multi-nationals and this Chinese company that is patent owners they are patent holders. They are suing the multi-national company for patent infringement. Chinese enhancing technological innovation and the success of this indigenous innovation policy. So the Chinese companies have more patents. Now they can sue this big company like Samsung, Microsoft and Apple.

Another trend is that these Chinese companies are suing each other. They use the patents as a strategy for market competition. Most significantly as a too big mobile operator. One is Huawei and another is Zed TE. They are suing each other. There is so -- they are suing each other. They sue each other for patent infringement. This is a strategy to prevent from being successful in the market. And we

see the many patent trolling happening in China. This is the views of patent rights and there is some professional patent trolling happening in China. This is bad. It means there must be some very low quality patent that's been issued by the Chinese patent authority.

The last but not least we see more antitrust action taken by Chinese authority. And the most well-known one is the Chinese authority against Qualcomm. And Qualcomm was fined for more than 1 billion U.S. dollars for the reason of monopoly or views of dominate position in Chinese market. Qualcomm didn't appeal. That was the final decision. Many other cases and IDC or China Mobile, China Telecom they are all subject to the antitrust actions. So antitrust is the last chapter of research, is very relevant to patent law. Another perspective is more about the competition. I don't have conclusion. But I do have some observations here to enable a really healthy and sustainable mobile Internet and mobile market.

Probably we need the following three things. One is a reasonable intermediary liability. So we won't just become too burdensome to these very important intermediary services. We need the necessary safe harbor design. And they are really flexible and open limitation and exception system. The second one we need to develop a really effective licensing and transactional model for the copyright material to enable people to access these contents more easily and conveniently and cost effectively.

Last but not least we need to maintain the market order to protect a really open and competitive market. So competitive law is very important in this process. And finally, well, thank you very much for supporting the project. Thank you.

>> VIDUSHI MARDA: Thank you, Professor. So we have actually covered three years of work in about 34 minutes. So I think we are doing well as a panel. I now turn to Anku who is a public director to give us a perspective from industry on the research findings and also what we could be looking at going ahead.

>> Thank you. I was wondering for those of you in this room who don't know there is a -- currently there is a brewing border dispute which is playing out between India and China. I am thinking the negotiators would do well to have Sunil and Professor advising them in terms of how to work together a solution. But that apart I think this is a very interesting and timely topic in terms of addressing the central team of affordability and access and the role which such collaboration frameworks play in terms of making sure there is more active sharing of specifications.

So from the industry perspective what has happened, what I would like to share there are two specific projects which some of you may have awareness of which as an industry collective has been brought together. One is the Open Compute Project, making sure that those designs and specifications are shared with the broader community and also startups and other engineers and academia which is working in

this area. And the Forum of the Mobile World Congress is used every
year in order to bring the community together and have a conversation.
So that definitely provides for a Forum. But here I think we also
need to regionalize and use Forums such as the APrIGF to bring
awareness.
    The second things which is also in the similar direction of such
active sharing with that principle is that Telecom Infra project which
was again launched as a subsidiary effort and that specifically
addresses three fundamental areas of access, backhaul and also core
management. The goal there again is to make sure that design
specifications as well as best practices are shared.
    The last element I think which the industry has been working on
very actively and using Forums such as ICC basis as well as the IGFs
to talk about is the requirement to delicense or likely license the
V band. So that more affordable technologies in the WiFi area could
be made available for mass access. So in terms of very tangible action
lines these are the three tangible outcomes which industry is
championing and working on. You can find more about the open compute
project on opencompute.org. There is multiple firms who are
participating in this in addition to the technical community. And
there is a lot of valuable information that's out there. We need to
make sure we are using experts from those areas to come and participate
in the meetings such as this to make sure those are more easily
available and accessible to people.
        >> VIDUSHI MARDA: Thank you so much Anku. And I turn to
Professor Park from Open Net Korea. I would like to call him a
discussant but he prefers to be called a heckler. I will let you decide
what title you go with, but to give us a sense of observations as
to research findings but maybe some perspective from Korea. Thank
you.
        >> Professor Park: I think this research is intriguing because
you have to think about why this all have to do with Internet
Governance.
        >> Can you turn that off?
        >> Professor Park: So I think any research project has
underlining etiology. And I think the thought behind this research
project is that one of the greatest opportunities for expanding
people's access to knowledge, trying not to get distracted, trying
to expand people's access to knowledge is through personal mobile
devices and the Internet connecting those personal mobile devices.
Personal mobile devices come with advantages that nonpersonal devices
or nonmobile devices don't have. If we have mobile devices, greatly
enhances the amount of time that you can spend on Internet, because,
you know, you can do Internet while waiting in line in a restaurant,
riding a bus. Also the personal devices greatly enhance people's
online activity because people feel freer in a private setting to
surf the Web, access knowledge. So I think -- this is all my conjecture

about how this research project was -- all kinds of distractions. But I'll go on. So I think that was the design behind this research project, that availability of personal mobile devices will greatly enhance people's access to knowledge. And you wanted to look in to -- I think research is wanting to look in to legal barriers to that scenario materializing.

   Having said that I think there are and I notice that the research project began a number of years ago. But my comment as a heckler is that for those years that -- for those years while you are researching the critical point has changed, has shifted from availability of devices to availability of bandwidth. Now it is more critical to provide access infrastructure than giving everyone a form to access the network. I'm not saying your research is no longer -- is no longer important. But I'm just saying there are now while doing the research, there is another monster that needs studying which is bandwidth availability. So, for instance, you looked at competition law and how that affects availability of mobile devices and ultimately the people's access to knowledge. But competition law has to face a bigger challenge in regulating or supporting the telcos and network operators in providing the infrastructure to the people who are not connected. Again I mean I think it will be relatively easier to give them a phone each than, you know, building the infrastructure, to building of infrastructure to connect with that phone.

   And competition law has -- it has a brother in digital world called net neutrality. And how net neutrality and competition law, some people confuse the two. I think we should make sharp distinctions. That will affect I think people's access to knowledge to a much greater extent than this other aspect of the competition law that was the top figure of research here. For instance, how that affects standard essential patents, because again device availability has become a more relaxed topic than otherwise.

   Moving on to China, I think that fair use, copyright fair use law is very important and important for expanding people's access to knowledge. Because a modified copyright law or copyright law equipped with fair access exception will allow people to view more videos, listen to more music which will finance the -- which will justify investment by network operators in building infrastructure. And will also make personal mobile devices more desired products. And, you know, after they have access to the infrastructure and the phones, now they can use that, use the combination for more important accessing, more important knowledge. So that's the scenario.

   That's where fair use law comes in. Now if fair use law is that important, Professor Hong, I don't think you need to wait until any statutory change. Fair use law, is any copyright law, before any statutory enactment because what is the purpose of a copyright law? The ultimate purpose? Compensation of authors? No, that's not the ultimate purpose. The ultimate purpose is promote arts and culture.

And let's say you want to talk about Shakespeare. You can talk about Shakespeare only by reciting some parts of it. As long as you are engaged in some creative project independent of the original one, now when you are reciting Shakespeare you are not -- you are not just using Shakespeare. You are doing an independent, new independent creation which is literally criticism. As long as you are doing that such use is already fully permitted in the existing copyright law. And some scholars have mentioned the recent change in Korean copyright law. But even before the statutory enactment there were cases that recognized the same exception.

Finally, I think that if the ultimate goal, if the ultimate kind of idealogical board of research project is expanding people's access to knowledge, I think there is more that the Chinese Government can do other than building infrastructure or giving citizens a phone each. The amount of -- the amount of freedom to access knowledge has -- can be very much constrained by censorship exercised by the state actors. And not only how much free access you have to broadband and how many phones you have, if you cannot access some of the sites that other global citizens can access, that operates as a constraint on people's access to knowledge. So that's also one aspect of -- that's also one legal constraint that we should think about in this research project. There is one other issue but I think I have spoke long enough. So I'll leave that for question and answer.

>> VIDUSHI MARDA: Can I have a quick response?

(Talking at the same time).

>> VIDUSHI MARDA: Comments or criticism.

>> This is a very good panel. For the Forum, we are here to talk with each other and have really interactive communication. We are not here to say we love each other, right? So that's good. Very good. We love criticism.

All right. Let's try to respond one by one, why this research is relevant to Internet Governance. Good beginning question why is relevant to IG. I assume this is -- why it is relevant because the mobile Internet is really the multi-stakeholder issue. As I said it always involved the regulatory authority that's from the Government, the business sector, all the producers and service providers and the users. The users, important stakeholders, they are not only the passive consumers. They are actually creating many things, the User-Generated Content. So this -- these multi-stakeholder structure once introduced in to this research, access to knowledge is a fancy term. It could refer the general information policy but here we only research one component in access to knowledge. Reform of Intellectual Property law to see what is the legal barrier and what needs to be built in and improve. So we are not using this A to K generally. And whether this is the only issue about the wise mobile device, not bandwidth oh, good. Very insightful comments.

Think about, especially the patent and competition law chapter from

both restrictions, we mention the standard essential patents. That's patents about the communication protocols. That's -- those standards are extremely about bandwidth, especially the 5G standards. This is absolutely about bandwidth and we are really researching that. I think my colleague from India can give a more detailed explanation. For fair use under Chinese law, we don't have this term called fair use in China. China is a civil law. We have to look at the statutes, what has been written in to the law when there is no legal basis, of course, is no authorization for us to use any work. Fair use is a term from the U.S. Copyright Act and that's a common system. That's different from our system. We will be happy to have such a fundamental natural rights and even not written in to the law. It could be cited in to the court proceeding. That's not the legal environment we are operating in. We will probably reform the limitation and exception in Chinese copyright law and have the very -- open clause.

   So apart from what all has been specified exceptions and limitations. I guess at most the solution we could introduce. Definitely not possible for us to introduce the four elements assessment and the American Copyright Act. Okay. Right. Yes.

      >> VIDUSHI MARDA: Thank you. Okay. So after that very insightful panel I will open the floor to the audience. We already have one question. You could just go up to the mic and we can take questions one by one. Please.

      >> I am from Taiwan. Thank you very much for your presentation. And I think it is very knowledgeable for all of us. But from my point of view are you actually talking about patent or intellectual property or what copyrights? It is good for the company to compete with another company. Or eventually making the mobile phone is cheaper for the user. But really concern is other issues. I think it is more important for a user in sales, in manufacturing all China, India or any Government or any economy, I am talking about as a general user. I think the point is that two things, first of all, I think you have to know you have a mobile phone on your hand. Do you know the manufacturing, we don't know what kind of code is implemented in to your mobile phone. It is a manufacturing correcting your information through your device? You don't know the mobile operator, what kind of information they collect from you or how the Government can assess lots of data through the mobile operator. I think this is something the user really concern. Because that is not transparent, it is not open to us.

   So that's the first thing about your device. And we know we are using a mobile, not only using the device, we are also using the app. A lot of people using the mobile only get on Facebook, WeChat. But the point is do you know Facebook and WeChat? What kind of message or what kind of data they collect from your access? And I think there is more a concern for the user point of view. We never know when we are using the WeChat or when we are using the Facebook, does the

Facebook and WeChat collect our information for life? Even when you die is the information still in the server. And I think that's the most important for the user. And I agree you are talking about it is good, particularly for the trading agreement. You are talking about competitive means between this company to that company. But I mean as a user myself I'm much concerned the hardware device and the app. What kind of data they collected from me.

>> VIDUSHI MARDA: Thank you. Thank you for that. It is definitely a valid point that you bring up. But I do think it is slightly outside the scope of this discussion because you are looking at more the data protection and security aspects whereas we are looking at the intellectual property perspectives of sub $100 mobile phones.

>> This is a quick response about being outside the scope. I invite participants to visit IDRC's website. University of Toronto is looking at cyber policy. Related to data protection norms and settings in that way. Sunil and others have done vast research on user's rights issues. Yes, it is outside the scope but I invite everyone to visit websites.

>> Hello. Jonathan Brewer from New Zealand. I hope I have an easy question for the panel. What is the cost component of intellectual property in a sub $100 phone, 3G, 4G phone?

>> This is something that is quite opaque to researchers. So I can answer it very partially. There are perhaps 100 standards in a phone that might have patent implications or royalty implications. For example, the LT standard there are multiple patent pools, even if you license from one patent pool, court case could be filed against you as a manufacturer from another -- from the members of another patent pool, yeah? So just for 4G and 3G it is 12.5% plus 4%. So that is 16.5% of the cost of the phone. These two standards expect as royalties for them. And the other royalties we cannot estimate because it is all nondisclosure agreement. Nobody is willing to talk. You can't go and see any documents from a patent pool organization. We also have some other numbers such as it used to be $5 per device for the MP3 standard. And our aim is to make sure that the price of these phones remain below the $50 mark or $100 mark, in which case we have to think of creative solutions around.

>> Thank you very much. That was great.

>> VIDUSHI MARDA: Do we have any other -- yeah. Please go ahead.

>> Sorry. That microphone probably shouldn't be used at all. It is blocking the translators. I have no comment, but to say I actually enjoyed the presentation as well as the research, but I wanted to share with you I just came back from a global meeting on international treaties and trade which is where my domain is. And I am currently planning to author some of these areas that you are talking about, the intention, the patent and competition law in relation to digital trade. But I wanted to inform the people in this room and our community that you probably know about the UN Sustainable

Development Goals, 2030. For the very first time the international
trade treaties and the legal community has now been included
officially within the space of Internet Governance as well. So I was
actually attending the meeting in Vienna for three weeks. And so a
lot of the things that you are talking about aren't even registered
on some of these what we call model laws and treaties. So I actually
I'm trying to plan to author some papers to inform at least within
Asia-Pacific how we need to move forward on a lot of these issues.
   And as you know I used to work with Internet Society. I do
understand the Internet Governance space but the space is
getting -- point. That's my point. And a lot of the issues on patents
and a lot of issues on what are the alternative ways in order to provide
access which relates to IPR issues is actually -- is emerging. So
I'd like to contact all of the panelists that if you could also be
contributing in the paper that I am about to author. Thank you very
much.
        >> VIDUSHI MARDA: Thank you. Could you clarify, your
affiliation?
        >> My name?
        >> VIDUSHI MARDA: Yeah.
        >> I'm Tipp. I think most of the people here, at least the MSG
knows me. So I'm working with the Institute of International Trade
and Development which is a UN kind of neutral from the UN but basically
mandated to do trade and development. For the first time they are
looking at digital trade. So I mean it is a happy news for the
community here. But we need to move on a lot of issues which you have
just raised.
        >> VIDUSHI MARDA: Thank you so much. Thank you. Do we have
another question?
        >> Yes. I am Nata and -- okay. I want to talk about tech, online
payment. Yes, yes. I received a new -- about Thailand control tech
online, online payment. Is one tool, toolkit, sorry, one tool to cut
off tech form section in Facebook, Facebook app, Google app. Youtube
app. Okay. (Speaking in a non-English language)
        >> He is trying to talk about the tax that's being collected from
the programmers about the code that is being used. And he is saying,
he just wanted to know what are the implications of all this tax that
are being collected with regard to how each countries have been working
on this about collecting the tax from the programmers.
        >> What tax? There is licensing fees? Oh. Anku as to the tax
that has been referred to?
        >> Is this royalties?
        >> VIDUSHI MARDA: So if we could have a clarification on what
exact tax.
        >> (Speaking in a non-English language).
        >> Ad hoc translator, what he is saying there are plans, the Thai
Government is thinking how to tax applications because applications

basically runs a lot of these new services. So the idea is currently if you want to -- if you want to put an ad on Facebook or any of the social media you paid directly to the providers, right? Which is the case for most of us. But what's happening now is -- they are actually looking at ways to withhold -- instead of just taxing the providers it is also to tax the people who are going to place those ads as some form of a grid holding tax. So I think he is a student. So he wants to know if this is a good practice or any ideas.

>> VIDUSHI MARDA: Thank you so much for the ad hoc translation and thank you for your question. Do you want to respond?

>> This is a -- this is an important intervention because different forms of equalization levy are being considered by different countries on additional transactions. In India last year through our annual budget making process through the Treasury Department, Ministry of Finance this came in to being for the first time, an equalization levy on e-commerce, on additional transactions. There is discussions in the international finance world to see how this does not end up being a burden to users of the Internet. But this is something where we are seeing a lot of ad hoc instruments coming in to place by different national governments. And I think just like on the intellectual property side there has been a lot of work in terms of demanding harmonization. So there are no special burdens imposed and this could be an area which we need to look at under the additional trade sort of theme to see that there is more discussion on requirement or need for harmonization.

>> I will just add, the competitive dimension, so what will happen is if you have the software provider in India then the India office will be registered merely as a sales office. And part of the expenses of the sales office is the royalty that is sent back to the main organization which is internationally headquartered. So the tax burden for a foreign software provider is much lower than the tax burden for an Indian software provider. So think through it very carefully. You are skewing competition in favor of foreign venders. It is a complex question. We are not experts in tax. I don't know if Professor Hong wants to add.

>> HONG XUE: Common Chinese law, thank you for the question. We do want to talk with the local Internet community, especially the young Internet users. Very good. Thank you so much. And the other law, we don't have a special category of taxation on the mobile apps or mobile apps operators. They are just business operators. They should pay roughly two kind of taxes. One is value added taxes. They are deemed as kind of services offered through Internet. So they pay -- I'm sorry. Oh, okay. Let me finish this. The second one is income tax as an enterprise. I guess some app operator on Apple store, Google store they have become a very successful business. So quite valuable. I guess most popular video games app in China is the King's Killer. I don't know how many people are playing that. That's so

profitable. So they -- they pay huge taxes. There is no tax exemption unlike American law. We don't have Internet exemption for this mobile apps or the Internet business. It is okay.

>> So just some information for you. I'm actually doing work in areas of ICT tax, customs, tariffs, international trade barriers in this area but I want to let you know there is a moratorium, a universal moratorium which is respected that all digital transactions will be taxed or levied in any way. It is reviewed every two years and it is a general understanding all Governments in the world to do this. This is more of the trade treaty areas. So this area comes full round for the second year.

WTO Minister meeting in Buenos Aires, there are two discussions right now. To continue to allow this moratorium to go as an understanding. In the case of China, China doesn't respect that. And maybe Thailand if they are going to go ahead with these things. But there is -- the second view is how can we make this moratorium binding and it becomes a very plurilateral type of agreement that every Government follows this. This is going to be held end of this year. This is my space. This is where I work. Which is why I need to write this paper to basically provide a lot of understanding to Governments, especially in Asia-Pacific about how we need to proceed on continuing to allow this as a binding rather than, you know, voluntary. Thank you.

>> VIDUSHI MARDA: Thank you so much. Do we have any more questions from the audience?

>> Could I ask Prashant from Software Freedom Law Center in India to talk about the work they have done around software patents? And also invite Basheer from the Web Foundation to talk about their report which touches on affordability of devices also since we are not getting questions. And then if there are remote questions, we would like to hear the remote questions also. Thank you.

>> Sorry, I just walked in. I didn't expect you to ask me to speak. Okay. So we have been doing some work in this area, especially with respect to patents in the area of software. So as per the Indian law patents are not granted for computer programs, they call it computer programs per se, business methods, mathematical methods and algorithm methods. We find that often patents are granted for these inventions which are not an excluded category. So this causes quite a lot of problem for the India industry. And often these irregular patents that are granted we found that more than 95% have gone to foreign entities. So I'm not sure how the situation is in other countries, in regions where something similar. So that definitely is a problem the way we find it. It is definitely for the local industry. Yes.

>> Thank you.

>> Thank you, Sunil. I think the layer that you brought out is very important because the Web Foundation we are looking at the device

tax and we recognize that a number of countries in the Asia-Pacific do tax consumers about what they ought to tax. And the two examples are Bangladesh and Turkey are the ones that tax the consumers the most. In the case of Turkey it is 49% and in the case of Bangladesh it is 42%. So this is on and above what consumers pay to the producers. So, you know, we are looking at the governmental tax for this. So at the end of the day the sub $100 phone, one may wonder if the cost of production might be $5, $10. We just don't know. We seem to be paying a lot of royalties, a lot of taxes to the industry, to the Government. So there needs to be a campaign in terms of ensuring that the poor man or poor woman on the street is able to procure the Smartphone at an affordable cost so they can also be included in the larger knowledge economy. Thank you for bringing this out.

>> VIDUSHI MARDA: Thank you. If we don't have any more questions I would like to go back to our panelists for a couple of closing remarks taking in to account all the comments and questions that we have had and also some of the challenges that have been posed to us.

Professor Hong, can I start with you?

>> HONG XUE: Okay. Right. Thank you very much for all the comments, criticism, feedbacks. I want to go back to Korwa's points. He mentioned the most important things and the most debated issue right now in the Global Internet Governance community is called algorithms governance. Previously we say code is law. Now it is more than that. The algorithms is now really governing our life and it has been widely used in the traditional community. It will be placed by robbers, by AIs. But these algorithms they are developed by human beings, by companies, by for-profit entities. They have their own interest. We presume these codes are neutral and effective. We need to look behind the scenes and whether this is an algorithm with some hidden side effects that's against the public interest and any harm to the social economic development, that's something which we think about. We have sufficient discussion about this world garden, propritarized system for communication and replace some open application in the morning. Internationalize the e-mail system, people say we have Facebook and WeChat, why do we need these internationalized e-mail addresses. That's very insightful discussions.

Look at algorithm, this is something new. This hasn't been sufficiently debated. I guess it is more than intellectual property issues. It is more involved. But general information policy and this new perspective of Internet of public interest in the Internet Governance. That deserve special attention from this community. Yeah.

>> I think in the first round I didn't talk about Korea much. And I'm not going to talk much anyway. But also competition law enforcement in Korea is much hampered by the competing roles of the relevant agency and the courts as well. Last time I checked 85% of

total fines imposed by competition authority in Korea were reversed by courts which makes competition authority very ineffective in enforcing the law. Probably it has something to do with the fact that Korean economy is cyber based, large conglomerates that vertically integrated and that have their hands in all different parts. For example, Samsung it is known as mobile phone maker, but Samsung sells insurance, apartments. Last time I checked they even made irons and fans that you get, you know, in summer. So these conglomerates have become the foundations of the Korean economy which have caused a lot of social problems, of course. Because once you are one of the minority who are employed by the large conglomerates then you don't have secure jobs. But anyway, so the lack of enforcement I think is not just an intellectual property law issue. But I think it is a much broader issue. It is affecting not just how standard essential patents are enforced. But enforced or restrained from enforcement. But on other areas affecting Digital Economy. That's it.

>> Thank you. I started my very brief introduction of myself and my organization with promotion. I'm going to end it with more promotion. Just to reflect on what Professor Park said about access to connectivity on prioritizing bandwidth and other dimensions of access to connectivity. We do recognize it is multi-facetted, multi-dimensional domain. I suppose you want to call it that sort of question of access. So just to promote some work that we are supporting. With the Association of Progressive Communications we are just supporting their work on community access. So this really challenges our notions of what a global network should be. So we are looking at areas where they are underserved, marginalized and no incentive for telcos to provide service. So we have examples. For example, in Mexico, Risematica, examples in Spain where people are putting up community networks and supporting themselves. We are supporting that. We are supporting communication policy, with an organization called LIRNEAsia and an organization in Africa called ICT for Africa and organization called DARSI which looks at the demand side of mobile Internet or broadband use and needs. And we are also looking at tech development where you are supporting the Indian Institute of Technology in Delhi, looking at cognitive radio and how that technology can spur on connectivity.

So just to say we are attacking the issue of access on many different levels and also worries of harms and damages and looking at data protections and user rights and digital rights. To say the question of access is very complex and we have to address it in many different angles and different layers.

>> I think the main thing for global business is the point about harmonization. That was a point which I think it is important to sort of make sure that there is more demand on, whether it is in the area of the international taxation domain, which Rohini Lakshane talked about and I think we had a Delegate from -- a Thai Delegate also

surfacing the same point or whether it is in the area of IP sharing.
I think the harmonization point is something which we need to really
think about and talk about.

>> I just wanted to talk about two developing policy areas when
it comes to phones. Maybe one development trend and another kind of
crisis in the U.S. market. The trend is that more and more countries
are beginning to talk about counterfeit phones. And the last time
we heard the phrase counterfeit it was to reference to counterfeit
medicines. In Africa and big support of certain UN bodies there was
this whole campaign about look at Africa being targeted with
counterfeit medicines. Of course, sorry, part of the problem was that
there was counterfeit medicines, but mostly what they were targeting
was generic medicines. They were demonizing generic medicines as
counterfeit. As cheap phones have entered the Brazilian Government,
some parts of the Brazilian Government are calling these counterfeit
because they don't carry the big brand names. And the move is to band
these cheaper devices because the argument is the manufacturers of
these cheaper devices are not paying the full royalties to the
rightsholders. That's -- but they don't go in to that. They just
say these are counterfeit and therefore they are unsafe. They might
explode and things like that.

  Fortunately some of the big bands also started exploding. It is
no longer something you can blame the cheaper phones on. So that's
the first thought I want to leave you with. That often the issue of
intellectual property will be presented to you in completely different
language. So we will be discussing intellectual property but then
the language used will have nothing to do with patent or copyright.
The second thing I want to say a little bit of the power that the
software manufacturers have and the telcos have when the telcos work
closely with these software manufacturers. So in America when you
buy a phone you usually buy it on a scheme and in conjunction with
telecom subscription. And because most of these phones are made in
China, for the Chinese factory it is cheaper to keep the insides of
the phone roughly the same. So it is the same whether it is sold in
America or whether it is sold in other parts of the world. So every
single phone sold in the American market has a radio, FM radio receiver
built in to it. All you have to do is connect your headphones with
an antenna. And you can use your phone as an FM radio listening device,
but because the telcos wants to have Big Data consumption, they have
hidden the radio feature, the FM radio feature from the user. And
there is no way through the operating system or through any application
you can turn that radio on. So the Civil Society people went to the
Telecom regulator in America and said this is very important. What
if tomorrow there is a disaster and the whole telecommunication
network comes down. The best way to reach the whole country will be
FM radio. And everyone has a mobile phone. And we will reach most
of the population. And the current regulator has told them oh, don't

worry, the market will solve this problem. But the frustration for me at least from Civil Society is while in some cases the market is solving the problem, prices are coming down, et cetera.

   In some cases the market is not solving the problem. So some amount of enlightened regulation is what we are calling for. Please don't misunderstand this as a call for more regulation. I think there are many areas like where we have to deregulate, where we are currently being very stringent about a spectrum. We have to allow for free use of a lot of the spectrum. The Government has to get out of regulation in certain areas. And it has to also carefully regulate in some other areas where the market actors are clearly not able to solve the problem for consumers. Thank you.

        >> VIDUSHI MARDA: Thanks. That was a very neat ending to the panel. And you have also given us a lot to think about. Thank you to all the panelists for a fantastic session. And thank you to the audience. We are hoping that these eight chapters that you heard about will be in a form of a book that will be available in English and Mandarin and Chinese. So we are hoping that that happens by December of this year. So buy a book. It is more than a hope. It is a deadline. But I'm just being pessimistic. So thank you and buy the book.

        >> I would like to announce to all of you that the international participants need to have their own headsets as well because you are going to get the simultaneous interpretation from Thai to English and we can do it. Causing all the inconvenience.
                              ***
        >>   This is being provided in rough-draft format. Communication Access Realtime Translation (CART) is provided in order to facilitate communication accessibility and may not be a totally verbatim record of the proceedings.
                              ***