Edited transcript of Webinar |The Geopolitics of Global High-tech Standards: Key issues and debates

(Webinar held by Oxford Global Society on 12 September 2022)

Robin Mansell 00:09

Welcome to this webinar on the geopolitics of global high-tech standards: key issues and debates. I have the privilege of chairing this discussion. I'm Robin Mansell from the London School of Economics and Political Science. My research is on regulation and policy and Internet governance, and most recently on digital platform-related legislation as well as social, geopolitical and technical implications of standardization. This webinar is sponsored by the Oxford Global Society, an Oxford-based non-political think tank, which focuses on contemporary issues of global interest; it welcomes people who are interested in its mission and have an academic research or industry background. Its team joins from anywhere in the world, and from whatever career stage they're at. I want particularly to thank Jufang Wang, deputy director of the Society, for her work in organizing this webinar; and contact information for the society can be found on its website.

A big welcome to our panellists and discussants for what we hope will be a very vigorous debate on issues around the development of global standards for critical and emerging technologies, which are abbreviated as CETs. 5G and AI standardization are debated widely these days in the US, in Europe and China. So, the questions that we're putting today, briefly are:
- does standardization in these areas raise new or distinctive questions?
- do values play a role in standardization?
- what are or should be the national security or ethical concerns?
- what is or should be the role of the state?
- what are the challenges for international cooperation? and finally,
- how does geopolitical competition impact on countries in the global South?

We've All Star speakers to focus on some of these questions. But before they speak, I intend to introduce our panellists and discussants in the order in which they will speak. They'll make initial approximately 5-minute remarks, and then we'll open the debate. In a final segment we will open to questions from our audience, and so you should feel free to send those questions along at any time during the webinar.

Our first speaker this afternoon, this evening, or this morning, depending on where you are in the world, is Professor Milton Mueller, who is at the Georgia Institute of Technology in the School of Public Policy, and the School of Cybersecurity and Privacy, in the US. He specializes in political economy of information and communication and is the founder and director of Georgia Tech's Internet Governance Project, which has helped to shape policy in the US and abroad.

Our next speaker will be Mr. Thomas Li, who is president of international standardization at Huawei. He is the founder of Huawei Standardization and Industry Department, and he has substantial experience of standards strategies for 4G and 5G and is board member of several international standardisation organisations.

The next speaker will be Professor Andrea Renda here, Senior Research Fellow with the Centre for European Policy Studies in Brussels and Professor of Digital Policy of the European University Institute in Florence. At the centre in Brussels, he directs the research group on global governance, regulation and innovation in the digital economy, and he regularly advises policy institutions.

Doctor June Park is Fung Global Fellow of the Institute for International and Regional Studies at Princeton University. She is a political economist and works on trade, energy and technology conflicts and particularly on data governance and emerging technologies. She serves as an expert for global consulting firms and advises think tanks in the US and abroad.

Dr Baisheng An is Associate Fellow at the China Academy of International Trade and Economic Cooperation of the Ministry of Commerce. He was head of the Chinese delegation to the WTO negotiations on technical barriers and standardization, and he specializes in standardization policy, regulation and international law.

These are our five panellists. We have two discussants; the first is Doctor Scott Kennedy, who is senior advisor and trustee chair in Chinese business and economics at the Center for Strategic and International Studies in the US. His expertise includes industry policy, technology innovation and business lobbying and he is an authority on US-China commercial relations and governance. And lastly our second discussant is Claire Milne, who is an independent consultant with direct experience with standards, recently as a consumer representative through the Consumer and Public Interest Network of the British Standards Institution, and in the past in relation to ITU-T Study Group 2 on numbering and other aspects of telecom network interoperability.

As you can see we have a very, very experienced panel. They come from different points on the geographical compass and they have different expertise and I hope that we will learn tremendously from them. Without anything more from me, can I invite our first speaker Milton Mueller to begin please?

Milton Mueller 06:03
Thank you, good to see you again, Robin and it's great to be involved in this program. So our topic contains two things that I think we need to disambiguate: the idea of standardization or technical standards; and this idea of critical and emerging technologies, which is a very loaded term that I'll explain the progeny of later. It needs to be put in a broader context.

The new focus on CET comes from a major shift in policy, where the US, Europe and China seemed to have lost sight of the way neoliberal globalization put interoperable networks, digital devices, data and software in the hands of almost everyone in the world, at incredible speed: starting in the 80s, throughout the 90s and continuing until about 2010, we built a very open global digital ecosystem and now we're turning away from that. So I call that turn away

digital neo-mercantilism. I see it as a reactionary policy movement, kind of a counter revolution, in which nation states are abandoning the globalized market driven digital ecosystem and trying to subordinate technology to their national political and military ends. It melds trade protectionism and domestic industrial policy with national security claims, and a chief driver of this has been the US-China rivalry, or more specifically the US' fears that it is no longer winning the global economic competition.

Now technical standards are not actually the main battleground of digital neo-mercantilism. Standards by their nature seek cooperation and compatibility. The ICT standards that matter most are still set by non-governmental entities, such as the Internet Engineering Task Force, the World Wide Web Consortium, the IEEE. And mobile telecom standards for 3G, 4G, and 5G were largely set by an organization known as 3GPP, which combines national standards organizations from Japan, China, India, Europe. South Korea and US. Now, it's true, there are some distributional conflicts around vendors' patent rights in these standardization processes, but no country has a patent monopoly, extending across all components of 5G systems. So the so called 'new IP' is a recent indication of how silly attempts to politicize standards can be. We're having a big debate about whether this is a good or a bad standard, when there is no standard. It's not a defined standard. It's a slogan or a direction that Huawei would like to pursue and in some sense, it's actually a solution in search of a problem. At any rate, any major shift in the world's internetworking standard would take at least a decade to be agreed upon and 2 or 3 more decades to disseminate, so there's no immediate threat from the mere idea of a new IP. But American interests are fostering fears that this nonstandard will spread Communist Party authoritarianism.

Now let me turn to the idea of CET, and I'll wrap up in a minute or two. The whole notion of a critical and emerging technology is a labelling ploy designed to expand the US government control over technology exports and foreign investment. And this in turn is a reflection of its paranoia about losing hegemony to China and reflects a really poorly thought out idea that we can somehow arrest the economic development of a foreign country as large and self-sustaining as China. In other words, it's a pure manifestation of digital neo-mercantilism. There is no scientific definition of an emerging technology and there never will be. This is a historical phenomenon, that you really don't know what's emerging until it's emerged, yet this policy train has gathered enormous momentum in the US. In the past export controls were applied to technologies underpinning specific known weapon systems. But in 2018, we passed new laws regarding export control and the regulation of foreign investment, which drastically expanded the scope of control to something called emerging and critical technologies.

Now if you look at the list[1] of CETs distributed by the US National Science and Technology Council, you have a really amusing list of in effect essentially any and every ICT on the planet - it's AI, cloud computing, hardware, firmware and software, undersea cables. I could go on; most of these are mature technologies not emerging ones, but that's missing the point. The list gives the US government and the prevailing China hawks a blank check to interfere in any R&D projects, any markets, any capital-raising effort, that they fear might develop

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[1] https://www.whitehouse.gov/wp-content/uploads/2022/02/02-2022-Critical-and-Emerging-Technologies-List-Update.pdf

competition in a foreign land. So I'll leave it there and hope we can have a good discussion of these issues as we go on.

Robin Mansell 11:25
Thank you very much, Milton, you highlight both the history and the deep controversy around these developments. I just have one question for you: do you know whether or not there is a counterpart list that exists in China? Which is, technologies that they considered to be critical in some sense?

Milton Mueller 11:47
Yes, there is, it's not quite the same. China has its national plans where they identify critical technologies that they want to become dominant or self-sufficient in, and obviously China is a mercantilist in its economic policy. I think what we often forget, however, is that many of these efforts have been unsuccessful. And when they have been successful they really are more about international companies like Huawei responding successfully to the market, rather than the massive subsidies that we've seen for something like SMIC, the semi-conductor manufacturer.

Robin Mansell 12:29
Ok, thank you so much. Let us turn to our next speaker who is Mr. Thomas Li from Huawei; would you like to go ahead, please?

Thomas Li 12:38
Thank you. I'd like to follow the questions one by one. OK, so for the first question I think, CETs standardization, of course, it's different. It's quicker. It's more innovative and more influential. But it's OK because there is already established an international standards framework for CETs. For example, if you look at 5G, you can see we have ITU-R working on the spectrum and technology selection. And also for the AI for strategy; also we have 3GPP to develop standards. For AI we have JTC 1/ SC 42 as well. That is a good framework for cooperation internationally. So I don't see any problem here, unless somebody is trying to break it.

For the second question the answer is basically no; just take the example of Huawei itself. At least 10 years ago we already submitted more than 5000 contributions per year to all different kind of global standards bodies, including 3GPP, ITU-T, IETF, IEEE; and hundreds of them. We are great contributors, we're not challengers, because we followed the procedures and the rules of the organisations. We don't break it, so I don't know why we have this crashing here and talk about values. You know, if we're talking about the values in standards like inclusiveness, like transparency, openness, it's OK, but if we're talking about human rights, freedom or socialism or capitalism, I'm sorry, my suggestion is: don't do that, don't bundle these values with standards goals.

The definition of these concepts are very different from country to country. If we put that in standards, we were facing the unstopping argument, maybe for decades without end. Maybe we never have a consensus. So I'd like to suggest we decouple all these so-called values from technical standards, and we will have a more efficient way to go to the global standards.

So the third question: how much room for international cooperation; I believe it's a lot. We can imagine the worst situation we would face, like China only doing business with Russia and the USSR only doing business with Europe. I'm sorry, that is a very bad situation, and it's a disaster, nobody is looking forward to that. Only when we have a strong business between China and the United States and Europe, that means we have a lot of room for international cooperation between the West and China. But unless somebody is going to break it, it's OK.

A further question, 4. Of course, this is a strategic importance of standards. Of course, everybody notices that, but if we say state intervention, maybe, but I think the connection between policy and regulation with standards always exists all the time, so it's not new. But if we put more so-called values into standards, I think that is bad. With my suggestion, we keep the values on the countries' self-regulation policies and put the consensus building of technologies in the standards: don't mix it up.

And in today's question 5, what's the main challenges, of course, it's not China. We heard that EU-US has the Trade and Technology Council which is trying to define standards with so called "like-minded countries". If I may I'd like to contribute a new word here: "like-minded standards". That is ironic because we all know that the spirit of standardization is to put unlike-minded persons together to reach consensus as far as we possibly can. But what is the "like-minded standard"? it's nothing. It's a real challenge for the global standards and ICT standards as well.

The last question's about one of the impacts of the current geopolitical competition on the rest of the world, like the global South. I think that's a big challenge because for global South, most of the countries don't have the technical competence to join in the technical discussion of the ICT standards. So they're followers, but if we have fragmented global standards, that's a great challenge for them. It's not easy for them; it's bad. So they may choose the wrong choices or they may be forced to join a different campaign. Not good for them.

So let me add one more thing after all these questions, that's why fragmented standards will happen. In my understanding there are two major scenarios. The first one is that the industry itself is already fragmented, that means the standard naturally will be fragmented. Nobody can stop that.

Another thing is, we all know the major value of a standard is to avoid vendor lock-in. If the standard means no vendor-lock-in, I think it is OK. It's a good standard. But it means there is only one vendor in the market or all the vendors or technologies come from one country and that country is very good on sanctions, at least something like that. That would be disaster for the business, it is a huge business risk just like Huawei is facing right now. So that will also naturally lead to achieving fragmented standards, because if the existing standards, existing behind the supply chain, cannot support the company, the company should choose another standard. That's for survival if for nothing else, it will naturally happen. So that's my general understanding of those questions. I'd like to have more discussion later with you guys, thank you.

Robin Mansell 20:42

Thank you so much Mr Li. I hear what you say about values and perhaps we'll come back to that in the discussion. But just a point of clarification. If you'd like to elaborate a bit more: how do you see it as being feasible to keep values out of the picture, behind the door?

Thomas Li 21:04
Yes, I already find out some way here, for example, the artificial intelligence. We have a lot of metrics for AI, like accountability, like transparency or security or privacy protection in standards. So these kind of things are, as far as I know, more technically definable. We can have consensus over there. And if we go to values, maybe different countries have a different weight of these metrics. Some country may have a much higher weight on privacy protection, some country would have a lower one, so we leave those differences for all countries' own policies and regulations. They can put that kind of factor on values over their own policies and regulations, but I think it is a bad idea to force other countries to follow them. So I believe we technically can have a way to decompose these two parts, to avoid conflictions. Does that answer the question, Robin?

Robin Mansell 22:24
Yes, it does, thank you. We will turn now to Professor Andrea Renda. Andrea, would you like to go ahead.

Andrea Renda 22:37
Yes, thank you, Robin, and thanks for having me in this fascinating discussion. Already I reshuffled my thoughts a little bit after having heard Milton and Thomas, and perhaps I start a little bit where Thomas has ended.

But first, a series of considerations - first of all, critical and emerging technologies. In my opinion, we can already differentiate between those technologies for which standardization is, to some extent, the defining foundational moment - if you wish, you cannot really proceed without at least an ongoing standardization process; and that is the case of 5G, and is already starting to be the case of 6G. And perhaps it will prove in the years to come a useful natural experiment, let's say, to see how fragmented or cohesive will be the 6G pooling of patterns and definition of overall standards.

There are other technologies for which the market develops and then the world seeks to establish standards, and I think that is the case for artificial intelligence, where the standardization largely follows an initial set of developments in the market, right; and there, we see, in my opinion, some of the most interesting traces of how the world is developing in the overall technological ecosystem, but also specifically on standards. So the timing is different, but in the case of technologies such as AI and all those technologies that present themselves as dual use, general purpose and increasingly pervasive, the problem is how to decouple, as Thomas was saying, the purely technical component from the social-technical (if you wish) part, and it's proven to be very complicated and indeed perhaps almost impossible.

As of now, as you see, already certainly some technical work on AI standards is being done by ISO/ IEC, as Thomas was mentioning before, but there's also the fact that increasingly you end up working on standards, for example, IEEE on human centric design, that end up incorporating some values. What is human centricity, and what is the role of some

fundamental human rights when you define human centricity? So the issue here is, the more technology becomes pervasive and dual use, the more standards start incorporating more social-technical information, and I'm not sure, I'm happy to discuss further with Thomas, whether decoupling is that easy in the case of AI or a number of future technologies. I can imagine standardization on data governance flows for example, and our privacy enhancing technologies, and that is equally controversial going forward, whether the decoupling can actually take place.

There's a second trend, and perhaps, I don't know if you and Claire will take that up, in terms of trends that I see in the standardization field that in my opinion are important. Regulation and standardisation are conflating too, and to a large extent are merging, because many regulations - and AI is again a very good example here – have ever changing technological subject matters, such that only through a concrete standardization process can the regulation fully take shape. And this is what I see in *the AI Act* at EU level for example, where the conformity assessment, which is indeed on trustworthy AI, so legally compliant, ethically aligned, the triumph of social-technicality if you wish, and technical robustness, obviously, but the trustworthy AI is now being defined and subject to a specific standardization process; they will need to incorporate in a standard all those elements that are far from being deprived of values and principles or legal or any flavour that might potentially be divisive in the global community.

Similarly, in the TTC that Thomas mentioned, the work to approximate the risk management framework and NIST with the conformity assessment at EU level and potentially make this a broader process has a similar problem, so standards become much more than technical information. In many cases they become more embedded in regulation than they were before, and so this also means standards become closer to national policy to some extent and they become also distinctive traits, to some extent, of national legal, economic tradition, social, cultural traditions.

We see that incorporated in what I see increasingly as being bundled offers that not only - and this is to also answer some of the questions that you had there on screen, the last one in particular on the global South - we see those bundled offers competing against each other, not only the Digital Silk Road in the sight of China, but also the emerging idea of building a technology stack, perhaps integrated between so called "like-minded countries" as Thomas is saying, that would compete against that, so that is a scenario that is completely different from what, and I agree with Milton on this, has traditionally been a truly global community, which is a community of standardization.

We are in a completely different environment there, where the forking is more evident, and I see this also in the market data, meaning some companies, I think about Nokia or Ericsson that used to have maybe 20% of the revenues in China, today they have 2% of the revenues in China. So the forking is also in terms of how the private sector can be the stronghold of the globalization of standards, I mean that is weakening, in my opinion. So where are we in terms of scenarios, as I come to wrapping up, for a long time we have thought - I don't know if the speakers agree with me - that the best possible thing that could happen in between those two different types of standards is what we call a Y shaped technology stack, where the lower layers, the more technical, the more infrastructural, are shared in the global community. The

more you go into policy and values, the more you see the forking happening, that's Y shape technology. A single stack, I think, is leaving. I agree with Milton, with the word, silly, perhaps but there it is. I see that happening at least to some extent. It is paving the way and is being replaced by a more splintered, more forked global scenario, which I think is far from ideal, and I think there's a lot more to lose than to gain from that, even if countries for other reasons that that I'd like to discuss, maybe later if you're interested, perhaps even related to the pandemic and other emergencies that we've had, the idea of technological sovereignty, reducing dependencies on other countries, is further favouring and perhaps exacerbating this process.

So finally a footnote: one of the signs of the emerging tensions there is the abuse, or I can say the global abuse, of the word global. In AI we have the Global Partnership on AI. It is not global. It has nothing that is global there. It is rather a G7 expression, right, to work with, obviously, a broader set of countries, but it is not global in nature; and we also have the Declaration on the Future of the Internet, which is obviously in everybody's mind these days, which is signed by 60 countries and far from global, even if the word global is incorporated in the declaration, and considering that the declaration also adds some clear remarks that are quite critical of certain ways of approaching Internet policy, they make it far from a global statement or even a global project, if you wish. So I'll stop there. And this is a little bit the trend that I see and perhaps for some of the solutions we can discuss later on, perhaps we find some. Over to Robin, and thanks for having me again.

Robin Mansell 30:37
Thank you, Andrea, just a quick follow up. As you describe, the EU kind of approached both the AI standardization and other areas. What do you think it would take to have regions or even the US backtrack a little, if they see their market shares diminish as you just described for Nokia and Ericsson? For example, do you think that this would cause a rethink or are we on the cusp of a rethink?

Andrea Renda 31:06
What I was describing is a reduction of their market shares in China and this obviously creates a temptation to integrate the two markets across the Atlantic to create more market opportunities for players. Latin America, North America become obviously very attractive markets and potentially, in the short term, replacing those revenues. Yes, I'm not sure that this is a long-term strategy, though, meaning that for the short term, and we are in a time of short-termism, I see this as an almost inevitable consequence. And I met, as one example, in the TTC again, the Trade and Technology Council between the EU and the US that I'm following quite closely; they raise the project of creating a joint task force in one of the working groups for deploying infrastructure and services in ICT in developing countries, so you see something that has never happened until very recently is now potentially happening because it's clear that their technology stack, that the Belt and Road Initiative, or the Digital Silk Road in particular, can offer to developing countries is much more complete and self-sufficient than what the US and the EU can do on their own. So this creates a little bit of a situation like, if we were in an antitrust concept, it will be a market where there is a big company. Another tool, to try to merge, to try to withstand the competition. If this leads to forking, I'm not sure that the global community will actually gain from this.

Robin Mansell 32:43
Ok, thanks very much and we come down to our fourth speaker who is Doctor June Park. June, would you like to go ahead?

June Park 32:52
Sure, today what I have been asked to do is to provide more of a perspective from the South Korean standpoint, and I do come from South Korea and there happened very recent developments on open RAN and standardization suggested by South Korea. So what I'd like to do is also go question by question, but more addressing these details from the South Korean take.

Over the first question, regarding international standardization frameworks for critical and emerging technologies, I think that we did this, guys, 5G, 6G in the context of 3GPP colleague cooperation. But open RAN, if we think about this as a radio access network that enables 5G, 6G, your suppliers that can have an integrated sort of a system in which hardware, manufactured hardware, is not really something that these men, these suppliers, have to be constrained by, and have a system in which they can choose from a different array of options in terms of hardware, then it revolutionizes the system quite much and is what South Korea has been trying to do. Again, I do agree that this is not a global effort, in that countries that dominate technology are at the forefront of this move, and Korea is one of them, but domestically what these countries that need to appeal to open RAN have to do is to present their own standards, that reflect their own environments in telecommunications, to be accepted, and that's where the very grey area of "like-minded countries", the value-related issues, come in, because most of these countries that have suggested their standards, they get along with each other so far.

And secondly, is China a challenger? Our second speaker did say that China is not a challenger and more of a great contributor, but seen from countries that do not have the technology it is a challenger, and countries that have to abide by a certain, I would say Western sort of take on this, it's really difficult to see countries aligning to both sides, if they have to adhere to both. Here, to assist them, Korea's is a hybrid system in this case, because Korea has not completely outlawed Huawei in a Huawei-ZTE ban. China could be seen as a challenger in another regard, regarding their data security law and the recently passed Personal Information Protection law that is looking into national security as the prime interest, whereas the EU's General Data Protection Regulation is more looking into the rights of the natural person.

So going into the third question, national security and ethical concerns. Of course, they've always been a critical issue and I think that, given the tensions between the US and China and given the priorities of data protection laws in each jurisdiction, that vary significantly, there is very difficult, I would say limited room for cooperation, if this is exacerbated into the coming years.

And then fourthly, regarding state intervention, I guess this is likely to be the main feature into the coming years. AI standard setting for military equipment, probably military implementation, missile detection, firing; all of these things will come into the state intervention context.

And fifth, regarding the main challenges and obstacles - what ways could be used to increase cooperation. I think that mainly if we see it in a bifurcated way, so US sanctions and, Huawei-related, China's economic coercion onto countries that abide by US sanctions. This is the main critical element: two factors really put countries to a test.

And sixth and last, the last response, on the impact on the global South. Seoul, South Korea does not belong in this category, but consider the countries that have to, that seek to have telecommunication strategy, and want to follow up as a leap frogger in the longer term, but do not have technology. They will have to choose a certain standard. But if they cannot come up with their own standard, they'll have to choose, and choosing would be a very, very political endeavour in this regard, or an economic issue regarding how much the cost is. So I'll end up there and I'll look forward to your questions.

Robin Mansell 38:08
Ok, thank you so much. I do have a follow up question for you. You mentioned the open RAN and the decoupling of hardware from software. I guess the question I have for you is: do you see that decoupling is inherently risky in terms of security considerations for everyone, or is it more or less risky in some parts of the world?

June Park 38:32
Oh, that is very difficult, you can't really put a finger on whether decoupling will arise in all areas or not. But what we know for sure is that a lot of the elements that are considered for decoupling, or any US move toward curbing certain technologies in the context of decoupling, as far as that component is concerned, ranging from semiconductors, Net Zero related technologies, or anything related to telecommunications, they are considered in the context of national security at the same time as economic concerns. So we will see certain technologies that are critical, what we call CETs in this webinar, they will continue to have these stress tests regarding whether this is going to be decoupled or not. And we will continue to have discussions on which companies get off the hook, which countries get off the hook, and that's going to create more tensions as we go on.

Robin Mansell 39:40
Ok, thank you for that reflection. Now our last panelist speaker, who is Dr Baisheng An.

Baisheng An[2] 40:05
Thank you very much, Professor. I have sent you the ppt on my presentation and I will be brief. Standardization governance: domestic and international perspectives. When it comes to domestic, I mean Chinese domestic reform, our standardization, and when talking about international perspectives, I mean, the trade rules for standardization.

So let's focus on the term "international standards". The definition for international standards is in effect not very clear. The TBT agreement and GATS for trade in services, maybe, it's said,

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[2] For much valuable background material please see An, Baisheng, 2012. The Global Governance of Standardization, RCCPB #32 Standards Nov 2012.pdf
https://dashi.163.com/html/cloud-attachment-download/?key=djAyVVhUQ0pKOVJNckw5L3pacXVGcjBlZz09

the organization should be open to at least all WTO members. All the other agreements, like SPS for food safety, are better because they mentioned 3 international standardization organizations. And in the TBT Committee, the US proposed 6 principles[3] for developing international standards, which were adopted as a TBT committee decision, while EU still focuses on IEC, ITU, and other international standardisation organisations. Some other members, like India, mentioned the development dimension at last year's Trade in Services Council, GATS; some members, around 60 members, reached agreement on a reference paper on services, domestic regulation where they mentioned technical standards. They are not talking about international standards. They just say the standards should be developed, through open and transparent processes. At the same time, in free trade agreements, members are pushing forward the definition for international standards. I'll give you an example where Korea is a member, EU-Korea FTA; another is EU-US FTA, so you can see the differences. You know, in RCEP, where China is a member, the 6 principles, which had been put forward by the US, have been written into the text.

We can also see some developments in the bilateral investment treaties, especially the China-EU BIT, that is comprehensive. Say AI, which is frozen currently, but at least they had reached agreement. I have in effect written quite 10 years ago, with the help of Scott Kennedy, he published my paper on the website of Indiana University when he was a professor there. Even though I mentioned the differences between the US and EU, I still have a lot of confidence that they could work out ways to deal with the differences, and you can say EU and US have been working closely and working well on standard setting. And so I'm confident and I'm sure China will do the same. China will work pretty well with the EU, US and others, we understand the setting, even though we are, to be honest, facing a pretty hard time currently. China is still on the way of reform for standardization governance. Just 5 years ago we had a new law for standardization where one prominent point is, firms are taking more and more the lead in standards setting.

At the same time, we have joined RCEP, and I have just mentioned the definition for international standards is there. So what's the implication of the RCEP definition for international standards? I think we of course will value ISO, IEC, ITU, as international standard setting organisations, international SSOs, as EU does. At the same time we are open to the definition of the United States as is written in RCEP. At same time, currently in China, we are developing standard setting organizations of international character. It is not international standards setting organization, we're not ICT hub SSOs like ISO, no that's for sure, but we are setting up standards setting organizations of international character. I'm sure there is room for further cooperation even though we have problems currently, and I'm looking forward to talking with you more.

Robin Mansell 47:59
Thank you very much. I think in the interest of time, we will move on to the discussion, if that's acceptable, and then we'll come back and allow you to respond to each other and address other questions. So our first discussant is Doctor Scott Kennedy - would you like to go ahead, thank you.

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[3] In brief, these are: 1. Transparency 2. Openness 3. Impartiality and Consensus 4. Effectiveness and Relevance 5. Coherence 6. Development Dimension. For detail see
https://www.wto.org/english/tratop_e/tbt_e/principles_standards_tbt_e.htm.

Scott Kennedy 48:20

Sure, well, Professor Mansell, thank you so much for hosting today and for Oxford for hosting this discussion. I've been a fan of the work of scholars there and elsewhere in Europe for a long time, and we've never had a chance to have a bunch of meetings together, and it's been too many years for me to interact with some of my colleagues in China who work on standards, like Thomas and Baisheng. But I just arrived in China, a few days ago, I'm in quarantine right now and in a few days I'll get out and I hope to go see Baisheng and everyone else who works on standards who's in Beijing, and continue the conversation that's been postponed for a little while. I'm your typical dragon slayer in the Washington policy community, if you go look at what I've written, but you all have pushed my defensive button, so I'm going to have to defend America a little bit here, and I'm a little bit surprised at the level of fatalism about decoupling, so you've pushed my optimism button, so I'm going to have to push back there, too.

Usually, I fight for being the most pessimistic person in the room, but I don't think I'd win that today. And I have, I should say, a lot of respect for Huawei. I remember going to a meeting in 2014 or 15 at the state information, at SIPO, the state IP office, and they were releasing a rule on standard essential patents. Defending the breadth of this rule and Huawei, .I believe it was Thomas's boss, Mr. Song, got up and made a very vigorous criticism of this very broad interpretation of standard essential patents, saying "let the market decide", and I thought there's a pretty interesting company right there. And Huawei's learned almost better than anyone how to participate in setting standards and being very effective. There are other Chinese companies that participate that just pour a lot of very limited and weak standards proposals into the process that slow things down, but I think Huawei doesn't fit in that category.

It was mentioned that we are in a period of digital neo-mercantilism. And I would say, I would agree, but I think it's important to know how we got here. And certainly the US has done some things, which are very inconsistent with what one would expect from the US government, with tariffs, placing Huawei on the entity list, expanding the rule with the foreign direct product rule, passing ECRA export control restrictions, FIRRMA on investment screening. At the same time, the Commerce Department issued an interpretation on standards, which said the US couldn't participate in standard setting with companies that were facing export control restrictions.

And that wouldn't have been my policy plan, I wouldn't have responded that way. But I don't think it's fair to say that the US was unprovoked in what it did, right? And that it's just simply trying to hang on and protect its hegemony without any reason. Certainly, China's strategy, of indigenous innovation announced in 2006, its closed domestic standard setting system, which is still discriminatory today; its government procurement rules, some of the things that it's done in how it's gone about promoting 5G, which has touched off anxieties by the US, UK, Japanese and other governments; China's rules on national security cyber data, and now its full scale self-reliance campaign - those are things the US and others are responding to now. We can decide whether or not the US ought to do it that way. But I think it's not that they're just responding to nothing.

So I think what we're seeing is a back and forth between two countries operating originally, two different ways, but increasingly similar. They're increasingly both practicing digital neo-mercantilism, not just one side, and I think it's ironic that the US is now working with the Europeans on "like-minded standards" when it was the US, originally, who was critical of China, making standards all by itself, so we've kind of changed our roles in a funny ways. But I don't think we should be so negative. I do think that we are seeing some steps by American industry, European industry and others to push back on this overreach and in fact, I think that's partly what's resulted in last week, the US Commerce Department issuing a new rule separating export controls from participation in international standards, which I think is progress.

I also think it's important to remember the US central federal government is quite weak. And so even if it comes out with rules, there's only so much it can do; ANSI, the US body which is supposed to be our national standard setter, is a very limited coordinating body.

I think we're going to see hopefully presidents Biden and Xi in November meet and talk about ways we might lower the temperature in their relationship and so I do think that there's some ways, which will avoid the most drastic types of decoupling in standards and else that we've talked about. I do think one area where I will be pessimistic is the US and China and others fighting. No one in that contest is representing the South, the global South. China doesn't represent the global South, China represents China and neither really strongly represents consumers. So the global South and consumers still largely are unrepresented at the table, and that's why the work Claire is doing with others to give a voice to consumers is so important, which means I should stop and turn things over to her. Thanks a lot.

Robin Mansell 55:39
Thank you, great segue into Claire's discussant comments. Would you like to go ahead, Claire?

Claire Milne 55:45
Thanks very much, and thanks particularly Scott for giving me the perfect opening. And just to revert to Robin's introduction, although I have had some contacts with the standards world over many years, I've been doing it much more intensively in the last few years as part of the British Standards Institution's Consumer and Public Interest Network, which sends people to take part in a selection of standards committees, by no means all of those which we usefully could contribute to, but as many as we can. And an important theme here, which applies to many types of stakeholders who aren't involved at the moment in the international standardization scene, or only marginally so, is being starved of resources; and I may say that the body I belong to, which for short we call CPIN, is better resourced than most comparable bodies in other countries, though it does have counterparts elsewhere; but we feel desperately under-resourced, and one of the things I would like to suggest is that we can make some positive progress, towards I wouldn't say solving the challenges, but perhaps diminishing them, perhaps bringing together those 2 top strands of the Y that Andrea referred to, by giving additional resources to under-represented stakeholders, which are not going to be huge resources by the standards of what's going into international standardization at the moment - but they could make a huge difference.

And going back to Scott, yes, my optimism button has been pressed also, which is probably mostly a matter of just my personality, I believe I'm an optimist generally, but also by the things that speakers so far have been saying. Maybe I have a slanted way of hearing what's being said, but I felt that each of the speakers did actually give some grounds for optimism, and I'm not prepared to accept what Scott said, that we should be pessimistic in the context of the under-represented consumers. Rather we should see them as an opportunity to be brought in and to affect things for the good.

And quoting from just a few of the remarks the speakers have made - I couldn't possibly reproduce everything, it's been a very rich discussion so far - I was interested that Thomas Li early on drew attention to this amusing term "like-minded standards", or perhaps he introduced it. But I would like to challenge the whole notion of "like-minded countries". A country is not a single entity with a single mind. Every country is a complex entity and the bigger the country is, and we've got two giants on the scene right now, the US and China, they're both very complex and they each of them have many minds at many different levels; and the bulk of the discussion we've been having relates to the attitudes taken by national governments and by industry giants. And I do believe that if we were to bring in more participation, by smaller companies, by consumer and user representatives, and in particular by the global South, that we would see that in each of these countries and in all the rest, there's a whole spectrum of different attitudes, different opportunities for cooperation across, for example, consumers, which is the ones I know something about. We already have European cooperation in the body ANEC, we have international cooperation on standards within the ISO COPOLCO, that's their Committee for Consumer Policy, and China is actually a member of Consumers International - I think there's half a dozen different consumer organisations in China, who are there ready to be brought into these debates.

So, looking to see what else I'd like to comment on from what the speakers have been saying, Milton, yes, I couldn't agree more about this term "critical and emerging technologies" being a term of very little meaning and constantly changing. So do let us be more careful about terminology, in that and other respects as well. I've already spoken about the "like-minded standards" that Thomas introduced.

Andrea - trustworthy AI. Thank you for trailing me there. Yes, that's one of my favourite topics. And that's another one where we desperately need some proper definitions, because I've listened to many discussions about trustworthy AI, and my impression has been that the people taking part are using different meanings of "trustworthy" and different meanings of "AI" and so you can imagine, we couldn't make a lot of progress in discussing "trustworthy AI", but that doesn't mean that it's not possible. And June, yes, countries are going to have to choose, and I think if we were to produce, among us, the resources to enable much more of the global South to make a meaningful contribution to these discussions, then that would be not just to their benefit but also to the rest of the world, because after all those countries are all of our markets of the future. And Doctor An - yes, you mentioned the development dimension; at the moment, India was leading on that; whether it will continue to be a leader I don't know, but I think that they too, can be leaders of the global South's participation in the development of the standards. So I'll stop there and hand back to you, Robin, for our next stage.

Robin Mansell 01:03:02
Ok, thank you, Claire. can I just say to the audience out there if you would like to ask questions please put them in the Q&A. So far, I don't think we've had any, so please feel free to ask a question to all of the speakers or to someone specific; thank you.

So we have had a very rich set of interventions and responses. What we seem to have here is a really intricate mix of politics and pragmatism, idealism, but also some of you have really emphasized the practice. It's not just all about what the wish list is for, or what might be, it's about who plays in the room.

I have myself once or twice participated in standard setting working groups and what goes on is what goes on, because of motivations of the individuals and the extent that they're representing their countries or companies, what they see as the best way forward, whether they choose to block or whether they choose to open up and negotiate amicably for discussion.

And so we have this sort of multi level, international, regional and national standardization exercise going on, and all of it matters hugely not just for markets, but for citizens and consumers, and for the companies and governments as well.

So I think what I want to do is, rather than pose specific questions to each of you, I don't think we have time, what I'd like to do is throw that out, and ask you to maybe reflect on the distance between the aspiration and the ideals that are articulated either by states or by companies, and actual practice. How do you see that unfolding in the near term in terms of cooperation possibilities? And so if each of you would like to intervene on that point or make a response to the discussion, talk to each other, please feel free. We still have half an hour. We'd like to reserve the last 10 minutes for questions, if there are any, but if there aren't any, you have another sort of 25 minutes, so I open the floor up now in the light of those reflections. Each of you should have a turn, but I don't necessarily want to go in linear order, so who would like to go first? Ok, June.

June Park 01:05:32
So how it would unfold, and again I'm limiting myself to the South Korean perspective, but the open RAN, the standards for the O RAN alliance that Korea suggested and was approved for, I think that would open up a lot of opportunities for Korean small and medium sized enterprises that work on these telecommunications equipment, goods, because they would be in the running for other foreign requests or tenders who are looking for appropriate prices, reasonably priced equipment, produced by different kinds of countries. Because the standardization has been approved, it will apply to these appliances. Korea would be expanding its 5G frontier and we'll have to see how this unfolds into the next couple of years. As 6G is developed, and there is going to be a competition on 6G, we'll see how this unfolds. But once a country suggests the standard and it is approved, that also signals further opportunities, so competition as well as opportunities.

Robin Mansell 01:06:53
Ok, thank you.

Thomas Li 01:07:03

Thank you. The response for the several previous speakers first of all. Thank you Claire, an accurate challenge for the "like-minded countries" and also I think I'd like to appreciate the scores at "don't put Huawei in the evil list". Even though I have some maybe technical network problems to hear all your speakers, the major thing I'd like to respond to is to Andrea and difficulties of cooperating between standards and regulation and the values. Technically, I think it is very much easier in a traditional standard way. All the countries work together, and we have consensus building; and if we can build consensus, that is global standards. If we can't, we leave back to our own countries, so that is a practical way.

Let me make an example on that. I can see that Mr. Philip Wennblom is also on the audience list. He is JTC 1 chairman. SC 42[4] is doing a very good job on AI Trust questions, as they're doing the standardization over there that everybody takes part in, including China, EU and the United States, everybody together. We have a lot of consensus over there, so it's possible to decouple unless other people intensively don't want that to happen. If they strongly bundle values and technology together, we get a fragmented standard, not global. So we can say that technology is honest. It's only zero and one; finally technology will not lie, right. Finally we can have reached consensus. But if we put it on the political scenes and values, there's too much difference, and maybe we have lies or conspiracy as well.

So maybe you have 100 years to have consensus over there. It's sometimes impossible. So it's all about the intentions of everybody in the meeting room - are we going to have a global standard consented, or we dislike it. That's all our choice, so that's my answer on that. Another point is that Andrea, you mentioned, that is Ericsson Nokia's market share in China from 20% to 2%. That's an interesting observation. Let's go back to the point of view of China, operators like China Mobile, China Telecom, China Unicom they dislike only one company to become the vendor; they like multi-vendor supplier environment very much. So why does that happen? I think there's going to be some kind of another reason. Maybe they put less investment in China, or maybe they have less services over there, or maybe they have not so good products. I don't know. Maybe we need some investigation on that, but it's not Huawei who pays the money, it's the operator who pays his money, so this is the situation. If that really happened, we've got to find what lies behind. That's my responding on that, so I'm not occupying all the time I'd like to respond to all things raised in question. Thank you.

Robin Mansell 01:10:54

Thank you very much. Maybe we come to Andrea next?

Andrea Renda 01:10:58

All right, thank you, Robin. Two things very quickly. One is on my observation on Ericsson and Nokia. Just to clarify, I'm observing and collecting data but obviously I have no personal stake in any of this. And I don't have an opinion as to whether this is positive or negative. But as an academic I observe what are the ties between different countries that could be represented by the fact that companies have a presence, right? And so the private sector, not only as being the real glue of the Internet since the very beginning, obviously from technical experts to entrepreneurs, and users of course, but the private sector could also be the one that

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[4] ISO/IEC JTC 1/SC 42 Artificial intelligence

convinces, by insisting for a global market, convinces the global superpowers to continue cooperating and for me, talking with many industry people, the fact that there will be two different technology stacks developing, or three in the future, is something that is being taken almost for granted by many, many market commentators over the past 5 or 6 years at least. And that is, I don't know whether others will share in these observations, but I think that is important, and so in observing what are the future incentives for keeping the standardization world united and cohesive, as opposed to a forking or a Splinternet I mean, and that is something that I wanted to note and observe. I don't know whether this is due to the quality of products or not of course, but certainly it is something that has been changing in the market over the past few years.

The second thing I want to say to respond directly to Robin's question is that, perhaps complementing what I said in the first part of my intervention, is that standards increasingly become social-technical and increasingly incorporate values, principles and to some extent, even legal compliance at the highest level. So the more this happens, the more we actually need, and this is for Claire as well, the participation of civil society and smaller companies and the global South in the definition of standards. So while on the one hand it is clear that the standardization community has been a global community until now, it is also clear that even without the temptation to splinter or to fork and so on, it's a fact that standards are becoming so much deeper, and more dense with ethical and legal considerations, even without (as I was saying) the geopolitics of it. We will still need to work on including civil society, including other voices in the setting of standards.

Obviously, the fact that there is the additional geopolitical tension makes it even more important, so I hope that the support that Claire was invoking actually materializes, because I think it's a very good idea, especially in specific standard setting contexts, to make the process a little bit less cryptic and technical and to bring in the voices that then correspond to the end users but also the future developers of technologies, and civil society as a whole.

I saw there is a question, I might get back to this in the Q&A. But I don't want to take too much time so I give you back the floor, Robin, and perhaps if I have a chance later I will talk about the "like-minded" from an institutional perspective. Ok, thank you. Milton.

Milton Mueller 01:14:43
Yes, there's a lot of complex material to address here and. I don't know where to begin, but let me begin with Scott's observation that the US was provoked; and in terms of this dynamic of digital neo-mercantilism, I have to agree that China is not some kind of innocent victim here. One observation I would make however is that in my research I discovered that Huawei started to be targeted surprisingly early, I mean like 2008 or 2009, and this is one of the odd things about the US targeting of Chinese companies, that because they are exposed to the global markets, we tend to hit the most open, internationally competitive, and least dangerous firms first. I'm talking about the Huaweis, the Alibabas, TikToks, these are all really commercially motivated companies, they're not Trojan horses for the Chinese state. And they seem to be interested mostly in making money, but there's no doubt about it, Chinese mercantilism and imperialism is partly responsible for this dynamic and I think what we need to be talking about is how to mitigate or get out of that dynamic. So China's policies are horrible. They have data nationalism, they have censorship. They have techno-nationalism;

their attitudes towards Hong Kong did so much to discredit them in the West. Their attitudes towards Taiwan are leading them towards a kind of a Russia-Ukraine situation, and makes everything cast in a military and national security kind of an environment.

The point I'd like to point out is that by weaponizing chips and telecom equipment the US is reinforcing these tendencies. You know, we're not working through the WTO and trying to bring them into compliance with free trade rules. We are remilitarising technology and I can only see that increasing China's tendency to go down a mercantilist path.

So I would really like some ideas about how we get out of that one last point that I want to address, values and technology. I don't know if you're aware that I've written some about this and I agree with Thomas that we cannot think of standards negotiations as ways of imposing our values and so on on people, right, and that's first, that is not really the way it works. Values, or sort of normative and institutional values, are implemented in in the way you adopt and implement a technology. You can run TCP/IP in North Korea and it's the same technical standard, but North Korea is North Korea and the US is the US in terms of the institutional and legal and normative values of those two countries.

It's not having anything to do with the technical features of how packets are formatted, right, so you need to come in to disentangle those questions and come up with compatibility relations first and foremost, and let people who are implementing the technologies and people who are passing laws and regulations worry about the values.

Robin Mansell 01:18:15
I'll stop there. OK, thanks Milton. Dr An.

Baisheng An 01:18:22
Yes. I would like to provide some sources of information. Firstly, with regard to the Chinese institutional framework for standardization, especially those related to information security like data flow - lots of criticism from the other side, but please read the WTO discussions, those discussions between China and US-EU. At the same time, if you could read the discussions between India, and Vietnam, mostly India, the discussions between India and other members like US, EU, Australia, Canada, Japan, you will have a very clear image about the criticism you have raised about Chinese standardization, especially standardization for information security, etc.

Secondly, China raised a topic in the WTO, that is IPR in standards. With that, if you could have time to read the minutes, which are publicly available on the WTO website, you will see how we could find potential for co-operation from controversial issues. Some 20 years ago, IPR was extremely controversial, however, we found ways of cooperation.

Third, you mentioned Chinese standardization is not indiscriminatory, but look at the China-EU BIT, the Article 7 on standard setting. And we are opening to each other, and I have been looking forward to it, however, it's frozen now. China had said we want it to be working.

I mentioned again Article 7, opening standard setting organization to each other. Fourth, you could read, or with the help with all the translation, the Chinese reform on standardization.

It's not easy for us to be definitely the same as US all of a sudden, but we're moving forward to opening up even now.

Five, read FTAs China has entered with other members, including Korea. There are lots of wording like cooperation, which seems not interesting because it's not clearly written, but there are lots of potential to enter those frameworks. So that if you want, you could try to find out ways of cooperation.

My last comment is civil society and the South or the development. I was with India when they talked about the international standards, the development dimension. I have been working in setting the standardization administration organization in China, where we are a member of COPOLCO, and I pay attention to the EU concern about civil society's participation in standardisation organisations. However, I've got two points to make: firstly, from the very beginning, the development dimension in standard setting has not been given full attention. And on civil society: it's not easy for civil society to participate in the standard setting organization and hopefully we could work more on that. Thank you.

Robin Mansell 01:23:56
Ok, thank you, we have generated some questions from the public audience and we have very little time left, so I think you've been able to see them. Perhaps what I can do is to say that one point that has been mentioned is to welcome the references to civil society and their importance and one of the questions is really, I won't read it out, but it's really about whether or not you see any possibility of the kinds of processes which have been inherent in the multistakeholder Internet governance setting, where civil society does play a role in governance - as an opportunity to think of alternative models and ways forward for standardization, in a way to maybe potentially avoid some of the conflicts and difficulties that are being faced.

The other one that I ask you maybe to address briefly is to come back to this issue of like-mindedness, which has been discussed a couple of times. I had something more to say about that, but I may also want to provide another final comment on the separation, if you like, of values from technical standardization, so enough from me. Very quickly, who would like to address these questions from the public?

Milton Mueller 01:25:19
I'll address the first one: so yes, I have a lot of experience in ICANN, and that was deliberately set up as a non-governmental entity for coordinating the Domain Name System and I do think that that is in fact, the approach that should be taken with respect to critical global standards. If you bring geopolitics and Nation States too deeply into that standardization process, you're going to get the subordination of the technology to military and political concerns, so one way of avoiding that is to have a civil society driven private sector led standardization process.

Robin Mansell 01:25:59
Ok, thank you, next somebody.

Andrea Renda 01:26:03

Maybe I'll check in, OK, so normally a good rule is that if you want to provoke others you have to do it four minutes before it's over, right, it finishes. First of all, I share Milton's comment on the fact as I said before civil society would perhaps be the force that potentially turns the tide, and then global standardization. But first of all in the mobilization of civil society, we have to ask ourselves whether that is divisive; or say whether it's as easy to mobilize civil society in China or in other countries and cities in other parts of the world. So it could be seen as a way to tilt the balance in favour of some countries as opposed to others and perhaps that is something that we should reflect upon, whether there is a meaningful way of doing this in a way that represents all the countries.

And obviously including the Global South, what I also wanted to say is that perhaps what is happening, what has been happening over the past few years - and I don't know if you agree with me, but this is something that I've been discussing on and on with experts in the field - is it's actually the other way around. So there is an overall accusation, mostly from the West towards China, having transformed the world - the world that was largely bottom up and private-sector-led - into a state orchestrated strategy, meaning of participation and standardization organizations around the world, that is really organized and coordinated from the state side, so this is triggering an equally organized response, if you wish, in the future on the side of the US and potentially the EU and other countries.

I don't know whether you agree with this or not, but this is, at least in the USA, the story that I've heard several times. So maybe it's got something to say about this, or others. And finally on the like-mindedness, I can only be very brief. I think we've discovered over time that to be like-minded, with all the caveats that Claire has specified, is one thing. To have similar incentives in economic terms, in legal and tradition terms, and in institutional structure terms is a completely different thing. One quick example is what happened in the TTIP, Transatlantic Trade and Investment Partnership, between the US and the EU a few years ago, where on things like risk regulation, there seemed to be an intuitive convergence, whereas in the EU, the structure in legal terms is completely different than the litigation system in the US, which makes ex ante controls less needed. The lack of this big litigation apparatus in the EU makes ex ante controls, and thereby, if you wish, certain regulatory structures, more needed. And so it's very difficult to converge even when you have intuitively common values or common solutions. OK. Thank you. June.

June Park 01:28:55
But it's not just your concern about this like-mindedness. I think it is a little bit too abstract for us to keep using this language because, of course, there's going to be like-mindedness. But every country, as I mentioned in my remarks, has a different way of going about data protection, data regulation and it varies by jurisdiction So what we need to focus on is how these differences will actually apply into reality, and if ever there is a regional or multinational multilateral effort, whether that is really efficient or useful to each jurisdiction or not so. Because those are the areas where the clear divide of interests amongst winners and losers will be apparent, so rather than just flocking to this term of like-mindedness, we need to pay attention to what really divides winners and losers.

Robin Mansell
OK, thank you, Scott.

Scott Kennedy 01:29:59
Sure, I think like-mindedness is an American synonym for countries that practice democracy and have rule of law. I think that's really what it's meant to be and it obviously is meant to not include China or authoritarian countries in general because of the view that: 1. You can't disassociate standards and technology from values and 2. You need systems of accountability and things like that. So I think we're looking at how do you go about ensuring the rights of participants and consumers and reasonable protections for them and national security. I don't think we're going to get away from that, but I agree, it's a word that's designed with that type of intention.

I would just say more broadly, the standards world when I first started paying attention 20 years ago, 25 years ago, the main contest was about rents. Who got the rents, which technology provider got the rents, etc. And I remember when I was here in the late 90s it was the Chinese were really upset from 2G, that they were paying exorbitant licensing fees, and to the DVD Forum, and the Chinese learned how to respond, and now they collect rents themselves. But in the process, we then came, we didn't solve the rents problem because there are still consumers and the South that aren't getting things at the price that they ought to and there's monopolies and things like that, but we then came across an added - on the national security level - challenge. And while the train is still moving, and the international standard system isn't really set up intentionally to deal with that problem because it's meant to be consensual and national security interests are meant to be zero sum. So I think we're going to be very difficult, then you add on this question of values. I do think the chant that our ability to do multi stakeholder standard setting will help, I do think another thing that will help is if the US and others got a little bit more self-confidence. I think they saw what Thomas and his team were doing and they were pretty scared. And I think if you just get a little more self-confidence and be willing to mix it up, they will be willing to get back in the game. So I think maybe the US overshot a little bit the last few years and I think we're going to revert hopefully to the norm again and I still think there's some real challenges that folks have mentioned with regard to China and the US, but I think there's a variety of different ways, and I think you'll see some adjustments in tactics.

Robin Mansell 01:32:52
So OK. Thank you. We are going into overtime now, I must not be a very good Chair, but I do want to give very quickly Thomas and Dr An a chance, so if you could be very brief, then we will have to draw this to a conclusion.

Thomas Li 01:33:08
Yes, thank you so much. I'd like to introduce, just like Scott mentioned, as a main stakeholder, this is a good mechanism that ICANN and ISO is insisting on that is a good regulation way on the Internet. We totally agree with that kind of way on the global network and global standards and the only threat on that one that I can see is the clean networks playing of EU and US government, so in the multi stakeholder mechanism, the government only have one vote. I think that's good enough to keep the globalization. That's my response.

Robin Mansell 01:33:53

Thank you very much. OK and Doctor An, very briefly because a couple of speakers have to go.

Baisheng An 01:33:58
Ok, thank you very much. Security is a key concern. But I'm still confident about future cooperation because I've been working on that for 10 years. It is common criteria, information security, by the EU and US, however, even under that framework cooperation is still going on so I'm definitely confident for the future cooperation. But at the same time, we need to work really carefully on how to cooperate. If time is up, thank you.

Robin Mansell 01:34:45
It remains to me to thank all of our panelists, to ask Claire to forgive me for not having her on again. But she's going to have a voice because she's going to be co-authoring the report that will come out of this webinar. I've learned a lot. I'm sure audiences learned a lot. I suppose my final remark is to say that in the contemporary geopolitical arena it's not very surprising that we have different views on the standardization process. And what we must hope for is that the development of 5G, 6G and AI actually does meet the aspirations of those who are the technology developers and is consistent with consumer and citizen interests. And so I'll stop there. I thank you enormously, I thank the Oxford Global Society for organizing this session, and I wish you all very well. Thank you.