

THE ECONOMIC CLUB OF WASHINGTON, D.C.

A CONVERSATION WITH JULIUS GENACHOWSKI

SPEAKERS:

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DAVID RUBENSTEIN: We're very pleased today to have as our special guest at the Economic Club of Washington Julius Genachowski, who is the chairman of the FCC. Julius has had a distinguished career in both government and business. In the government world, he has served as a law clerk in the judiciary branch for a number of prominent judges and justices – Abner Mikva, right after law school, and also Justice Brennan and Justice Souter. He also worked on Capitol Hill for Chuck Schumer, and worked on the Iran Contra investigation as well, as part of the joint investigation committee.

In the business sector, he has been involved as a senior business executive at IAC/Interactive and was there for nine years, starting as general counsel, and became in the end the head of business operations.

He has also been a venture capital investor, and had his own incubator fund operating out of Washington, D.C., to help nurture a number of small, and young, digital-related companies.

He's also somebody who has had a distinguished education background: he graduated magna cum laude from Columbia and magna cum laude from Harvard Law School. At Harvard Law School, he was a senior editor of the law review at the same time that President Barack Obama was president of the law review and so he met President Obama there.

So, he became chairman of the FCC in June of 2009. He was nominated by President Obama in March of 2009; confirmed in June of 2009. And since that time, has done, I think, a very, very outstanding job as the chairman. And I'd like to ask him a number of questions relating to what he's done as chairman but before I get into that, I'd just like to ask you a couple personal questions.

You have worked for a lot of very smart people; some of the people with maybe very, very high IQs. You worked for Chuck Schumer, you worked for Barry Diller; you worked for Justice Souter, Justice Brennan; you've worked for Barack Obama.

Who is the smartest of those people? (Laughter)

JULIUS GENACHOWSKI: Yeah, well, I have three kids – (laughter) – and no favorites.
MR. RUBENSTEIN: So, ok, they were all smart.

MR. GENACHOWSKI: I'll tell you they do share some attributes that I've noticed over time: relentless curiosity, real energy for interactive exchanges on issues that they are dealing with, and just kind of a core belief that the best ideas and answers come out of a marketplace of ideas, and willingness to take great ideas wherever they come from. And so it's some of the attributes that I've tried to employ in this job.

MR. RUBENSTEIN: Well, when you first met Barack Obama you were a Harvard Law School student, and you – I gather you played basketball with him. Was he getting easy lay-ups – (laughter) – in those days or was he really that good a basketball player? And did you think in those days – he was the president of the Harvard Law Review. Did he say he liked this word “president” or, when did you get a sense he might go into politics? (Laughter.)

MR. GENACHOWSKI: I think it’s kind of known via YouTube that he has a terrific jump shot. What’s probably less well-known is that as a basketball player he can go to his left as well as his right. (Laughter)

MR. RUBENSTEIN: I bet. As president as well, right?

MR. GENACHOWSKI: People ask me whether I knew back then that he was going to become president, and I think that the right answer is: Oh, of course I did. (Laughter.)

But actually, I knew how incredibly talented he was and is, and recognized his extraordinary leadership abilities and real commitment to making a positive difference for the country. I didn’t know if he would do that in government service or in the private sector or in the nonprofit field, but I knew he’d make a real contribution.

MR. RUBENSTEIN: I gotcha. Now, when he was elected president, I gather he considered you to be chairman of the FCC, and you obviously accepted.

I know you were chief counsel of the FCC under a previous chairman, but why did you want to be chairman of the FCC?

MR. GENACHOWSKI: Actually the truth is, I really enjoyed what I was doing in the private sector and I liked my life a lot. But, it was one of those things that I learned as a kid that if you got the question, you’re not allowed to say no to it. Public service is really important and I think it’s very important that people from business backgrounds, from lots of different disciplines, come into government.

The FCC is a very exciting place because it’s about our future. You know the communications technologies that the FCC has engaged with are such a vital platform to our economic growth in the 21st century, our global competitiveness, job creation, productivity. And so I think it’s as exciting a place in government to be as anywhere else.

MR. RUBENSTEIN: Now, the FCC has five commissioners, and I think only three can be from one party. So typically you have, let’s say, three Democrats or three Republicans and then two on the other side. But I gather you’re not allowed to talk to another member more than – you can’t have more than two members talking privately, so is it hard to kind of get decisions worked out in advance? Or you just do everything in public?

MR. GENACHOWSKI: Well, talking one-on-one to other commissioners really is valuable. There’ve been some proposals for reform for changing that. Staff works together, and

that's fine. And, you know it's interesting; people think that everything we do at the FCC is on a party-line basis – and nothing could be further from the truth.

Well over 95 percent of our decisions have four or five commissioners supporting them. And I don't think that should be surprising. It's something that I work very hard for every day, and I think all the commissioners do. And in this area –harnessing communications technology to grow our economy and compete globally – it's not a partisan issue.

MR. RUBENSTEIN: On one of the large issues –I don't know if it was unanimous– the Comcast-NBC Universal deal. That took about a year to resolve. Did you ever have any doubt that that was going to be approved?

Or, was it inevitable? I mean, when you get a large acquisition like that, is it very difficult to say no to the two business parties involved?

MR. GENACHOWSKI: I've made it a policy not to talk in detail about merger review. The agency has a very important responsibility when it comes to merger review.

Often we do it together with the Justice Department or the Federal Trade Commission; often there'll be state governments reviewing transactions as well. So, it's very important that we not prejudge transactions. follow an honest, fair, efficient process, and meet our statutory duty to make sure that mergers are in the public interest.

MR. RUBENSTEIN: So you don't want to give us a hint on AT&T-T-Mobile.
(Laughter).

MR. GENACHOWSKI: In the zone of mergers that I won't comment on.

MR. RUBENSTEIN: OK. Hold on, let me ask you about mergers, though. I know you can't comment on them specifically, of course. But so much of what you've done and others are trying to do is to speed up the decision process and information flow to people. Yet, we're still making large decisions like this in a very slow process; it takes a year or more to get one of these decisions through the FCC.

Is there any way to speed up the process so that if somebody who wants to merge will know in less than a year and a half whether they can do the merger or not?

MR. GENACHOWSKI: Well, we've been doing that. I'll give you one example. Historically, in many, many cases, there was a gap that could be very long between the time that, say, DOJ or FTC ruled on a transaction or the state governments that have to do it and the FCC. We've brought that gap way down.

I know enough from my time in the private sector, it's the kind of thing that can legitimately drive a company crazy. And then there is the risk that you may end up with inconsistent decisions from different review agencies. So, we've worked very hard to make the process more efficient, and we have.

MR. RUBENSTEIN: There are three Democrats right now on the commission; two Republicans. The fact that you're a Democrat – does that mean that the president of the United States or the White House staff can call you up and say, here's what we think on some things. Or, don't they do anything like that in terms of telling you what to do on policy?

MR. GENACHOWSKI: No. There are rules governing exchanges, and obviously they're honored.

MR. RUBENSTEIN: Let me ask you about net neutrality; that's something that has been a buzzword for a while. Can you explain in simple language what net neutrality actually is? (Laughter.)

MR. GENACHOWSKI: By the way, a term that we use is "open Internet." That, I think, is a more descriptive term than net neutrality.

But in any event, fundamentally, it is the right and ability of people, whether individual speakers or businesses, to send and receive lawful content online.

So, whether you're a person with a point of view and you want to put it on the Internet for an audience to receive; whether you're an entrepreneur, a small company or a large company, knowing that you can innovate, put something on the Internet, have the market decide whether it wins or loses -- that's fundamentally what open Internet is about. In a different context, someone said to me last night at a Seder: Everything else is commentary. (Laughter.)

MR. RUBENSTEIN: Ok, let me give you some commentary. (Laughter.)

You have proposed rules which I think the House of Representatives didn't support exactly in a resolution and people on the other side don't like them either. I think the conservatives and the liberals -- let's say, left and right -- don't like your proposed rules.

Is that a surprise or does that mean you've probably come up with a good solution?

MR. GENACHOWSKI: When I became chairman, we inherited a real mess around this topic. There was uncertainty, there was confusion, there was internecine war going on among companies in the broadband economy. I felt, one, that preserving the fundamental free-market, open character of the Internet was very important. And, two, that we needed to bring an end to this war, put in place a framework that made sense and then move forward and tackle a whole series of other issues that are very important to our broadband future.

MR. RUBENSTEIN: And you proposed the rules now –

MR. GENACHOWSKI: We've adopted them.

MR. RUBENSTEIN: Adopted them. But they're subject to litigation or not?

MR. GENACHOWSKI: They're subject to litigation. But the first thing I'll say is that we adopted a framework – a wide touch framework, that's a little more than page in length. I challenged the team to get it down to a page or they didn't get their bonus.

MR. RUBENSTEIN: Did they use a smaller font? (Laughter.)

MR. GENACHOWSKI: I can't read the smaller font anymore. (Laughter.)

The framework was widely supported by stakeholders throughout the ecosystem: from early-stage entrepreneurs and investors to larger technology companies, as well as larger and smaller ISPs.

Now, as you say, we didn't get everyone, and you can't make everyone happy in this job, but I'm very proud of the work that the staff of the FCC did. We've done our work, we've moved forward to other issues our mobile feature and spectrum, universal service for broadband, obstacles to deploying broadband infrastructure -- those are what we're focused on now.

MR. RUBENSTEIN: Let's talk about spectrum. One time not long ago, I was walking up an Andean mountain –Machu Picchu –and I got a cellphone call. It worked perfectly. Yet, when I'm walking down the street in New York – (laughter) – or driving south of White House, I get interference. Why is it that the cellphone connections are so much better in the Andean mountains than they are in New York City or Washington?

MR. GENACHOWSKI: There are a couple of issues, and let's take them in turn. The first issue involves whether we have enough spectrum to meet the growing demand in mobile. Now, some people here live their lives around spectrum in our airwaves and some people are new to it, but fundamentally spectrum is the oxygen of mobile communications. If you are using a smartphone or a tablet, or the machine-to-machine devices that are coming out, they all use spectrum.

And the innovation and growth in this area has been just incredible in the last couple of years, and on a trajectory that's just amazing. Three years ago, the app store didn't exist, and now between Apple's app store and others, multiple billion applications have been downloaded. All of the tens of thousands of companies that are developing applications, working around applications, didn't exist three years ago. It's now a 38-billion-dollar industry with, as I said, tens of thousands of companies and hundreds of thousands of employees.

MR. RUBENSTEIN: All using more spectrum.

MR. GENACHOWSKI: All using more spectrum.

So here, just to give a sense of this growing gap between demand and supply, let me give you some underlying numbers. The smartphones that people use, as compared to the old feature phones, place a demand on spectrum capacity that's almost 25 times that of a feature phone. Not two or three times – 25 times. A tablet places a demand on spectrum capacity that's almost 145.times greater. But the amount of spectrum that we have coming online to meet this demand

is essentially flat. This is potentially a real problem for our mobile broadband economy and we have to find a way – and we have some ideas – on how to free up more spectrum for mobile broadband.

MR. RUBENSTEIN: The problem I have – let's say, if I'm driving south of the White House, and I notice the same thing in some other parts of Washington – the cellphone breaks up – the connection. Is this the spectrum problem or is it some other lack-of-towers problem?

MR. GENACHOWSKI: It's two things coming together. In some cases, it's congestion, and we've all experienced what it feels like to be in a very congested area: You can't get a connection, you have dropped calls. That's the kind of thing we'll experience.

MR. RUBENSTEIN: But you don't. I assume you have a special FCC chairman phone? (Laughter.)

MR. GENACHOWSKI: I assumed we had a secret warehouse with –

MR. RUBENSTEIN: No?

MR. GENACHOWSKI: – spectrum. We don't.

MR. RUBENSTEIN: And, you don't.

MR. GENACHOWSKI: The other piece that contributes to the problem is – there is infrastructure that's required for transmitting a wireless signal from one place to another. There are parts of the country where it takes much too long and it's much too expensive. This also contributes to slowing down the connection.

We're working on both of these fronts. How do we free up more spectrum for mobile broadband? How do we reduce barriers to broadband infrastructure rollout? They're complicated challenges.

MR. RUBENSTEIN: One of your proposals relates to some of the television's broadcasters giving up some of their spectrum – in effect auctioning it back. Can you explain how that works?

MR. GENACHOWSKI: We've had a major innovation in spectrum policy. Maybe the most significant change was moving an allocation of spectrum from comparative hearings and lotteries to allocating spectrum through auction. Over the last 20 years, this has led to incredible innovation, incredible amounts of private investment – it's worked.

We've auctioned off all of the easy pickings on the spectrum chart and we're now left as a country with figuring out how to reallocate spectrum that was assigned before auctions for flexible use came into effect so that the market can decide the highest and best use for spectrum?

So, we've proposed expanding the auction tool so that it applies not just when people are bidding for spectrum at auction, but also applies to the supply of spectrum coming into an auction. We want the tool to run a two-sided auction in a number of different places, including broadcasting, where the supply of spectrum in the auction will come from existing licensees who voluntarily contribute their spectrum to the auction in exchange for a share of the proceeds of the auction.

MR. RUBENSTEIN: But are they interested in doing that? Are the broadcasters willing to do this or not?

MR. GENACHOWSKI: Well, I don't have any doubt that if we ran this auction we would free up a significant amount of over-the-air broadcast spectrum. Now, remember, the broadcast world has changed a lot in the last 20, 30 years. I grew up, like many of us, and 100 percent of my broadcast TV-watching was through the antenna on our house.

Well, it's not the experience that most people have anymore, but there are still a lot of stations, particularly in major markets. If we could run this kind of auction, we'd end up with a very vibrant, stronger, healthier broadcasting industry. We'd also free up a significant amount of spectrum for mobile broadband, raising literally tens of billions of dollars for deficit reduction. Even more important than that, we would generate an economic value for the country that economists project would be at least 10 times the magnitude of that.

Let me tell you one thing about this proposal. Two weeks ago, 112 economists – leading economists, Nobel Prize winners, economists who worked in both Republican and Democratic administrations, former chief economists from the FCC under both Republican and Democratic chairmen – signed a letter saying that we need to do this as a country.

We've got bipartisan legislation introduced now in both houses of Congress. We have industries representing the people in the room who were involved in this, a thousand – 2,000 companies representing a trillion dollars in revenue. This is an example of the kind of issue where, as a country, we ought to be able to move forward together to make sure that this basic invisible infrastructure is not an obstacle to the kind of growth and job creation we need.

MR. RUBENSTEIN: So you think this will happen?

MR. GENACHOWSKI: I hope it will happen; it's very important.

MR. RUBENSTEIN: Back to my cellphone again, though. When can I expect to be able to drive around Manhattan and not have cell calls dropped? Is that a one, two or three years away prospect, or is it hard to predict?

MR. GENACHOWSKI: If we don't do something like this, the situation will get worse and not better over time. Because, you and people like you are using your data-hungry, high-speed devices more and more and more. That's great; it's generating investment, it's creating jobs, it's making sure that the innovation around this area happens right here in the U.S. I hope

everyone continues to use all these devices, and it continues to have this wonderful virtuous circle of driving innovation and investment.

MR. RUBENSTEIN: What do you use? Do you have a cellphone? Do you have a BlackBerry, an iPad? What can you say you use?

MR. GENACHOWSKI: I have tried over time to use all of the above, and it's actually something that I've been thinking about in connection with the FCC. I think it's very important for the staff of the FCC to have hands-on exposure to the cutting-edge technologies that the staff is working on. It's not that easy, not everyone can have multiple devices, and, if you're a government employee, you can't afford multiple devices.

So, we're working, for example, on setting up a technology experience center at the FCC. Basically, this will be a personal library, and then a lending library, for cutting-edge devices so that we can make sure that the staff of the FCC has first-hand experience with the kinds of devices that they're working on.

MR. RUBENSTEIN: Right now, when you use a cellphone, do you put it up to your ear? Are you worried about cancer, or you're not worried at all about health effects?

MR. GENACHOWSKI: (Chuckles.) Well, I'll tell you one thing for sure: when I'm driving – (chuckles) –

MR. RUBENSTEIN: You don't text when you're driving?

MR. GENACHOWSKI: You know, distracted driving is an incredibly serious issue there. My hat's off to Ray LaHood, the transportation secretary, for being a real leader on this. But we do have to get a message, and have smart policies around, making sure people don't text and drive. I'm sure I'd feel this way even if I didn't have a 19-year-old. But it's very serious.

MR. RUBENSTEIN: But you're not worried about the health effects of using cellphones?

MR. GENACHOWSKI: No. For years, the FCC has set standards working with the FDA, they've done a lot of studies – so has the World Health Organization. The standards that the FCC sets are based on the research and health studies that the health agencies do. So no, I'm not worried.

MR. RUBENSTEIN: OK. Let me ask you about your proposal for people to be able to text 911 as well as call the number..

MR. GENACHOWSKI: Yes.

MR. RUBENSTEIN: Why would that be better, or what's the advantage of it?

MR. GENACHOWSKI: First of all, I think a lot of people don't realize that they can't text 911. We saw this at Virginia Tech, in that terrible tragedy a couple of years ago, where some students tried to text 911. There was no one on the other side of that text.

You can't right now – as a general matter although there are a very small number of exceptions to this – you can't send a photo from your smartphone to 911; you can't send a video. If you're outside a burning building and you can send some information that would be helpful to a firefighter, or you see a robbery, or something – well, it's crazy that you can't do it

This world has moved so quickly that I think this has gone from something where three years ago, where most people would say, "Oh, you can't text 911? OK," to a world where it troubles more and more people, and it should. Like a lot of problems, it's not a simple problem to solve, like making sure that our first responders, our firefighters, our police officers have a mobile broadband public safety network, which they don't.

All of these things are ideas that were first identified in the 9/11 commission report. They all – and you have to say this even in this economic climate and deficit climate -- they all cost money. But, this is an area where we have to make the commitment, find the most efficient ways possible to make sure that our first responders have the tools they need to save lives.

MR. RUBENSTEIN: So you're doing something about this now in your proposal?

MR. GENACHOWSKI: We're doing a few things on 911; we're working with other agencies here. One of the obstacles to having what people call e-911 is having a set of standards that people are building around the country. It'll be a significant efficiency driver, a cost reducer. So we're working to accelerate the development of those standards.

We're working on another thing that people don't realize sometimes: The location accuracy of a wired 911 call is close to 100 percent because of how the system is developed. The location accuracy of a wireless 911 call is much lower, and, in some cases, it's really problematic. If you're in a skyscraper, they'll often not know exactly what floor you're on. If you're in a very rural area, they can miss knowing where you are by a matter of miles.

It's another thing where we're trying to incentivize the development of the technology and industry rollout of better technologies that can save people's lives. Just watching what's been happening in Japan, and Haiti last year, we know there's a lot of work we need to continue to do to get our public safety infrastructure into the 21st century.

MR. RUBENSTEIN: What about other countries? Other countries often seem to have mobile devices that are more advanced than ours, or they have a spectrum, I guess, that's less of a problem than here. What are you trying to do to make us more competitive with, let's say, the larger emerging markets – China, Brazil, India? Why do their telecommunication technologies seem to be more advanced than ours, or maybe they aren't?

MR. GENACHOWSKI: This is why our wireless agenda, our spectrum agenda, is such a high priority for us. These incentive auctions that I mentioned, other steps that we can take to

liberalize the rules on spectrum use to get more from mobile broadband, working on getting secondary markets in spectrum going – there are a whole series of ideas.

The reason it's so important is that, around the world, it's not our little secret that mobile is the future. And countries around the world understand that there is economic growth, there is job creation, there is innovation in the future of mobile. Many countries see it as possibilities to leap-frog technologies if you can go straight to wireless.

When I meet with my counterparts in other countries, I see a real focus on the mobile future. It's one of the reasons that we're spending so much time on incentive auctions. The costs of delay are very high, not only for consumer frustration and investment in the United States, but because we're playing with fire. We're playing with the fire that we could see the great American-based innovation companies that right now are doing so much in this space decide that the opportunities for developing and rolling out new products are someplace else.

One anecdote: A company called Applied Materials – a very important American technology company based in the Silicon Valley, an energy technology company – decided a little bit less than a year ago to move its chief technology officer and its CTO-operations from Silicon Valley to Beijing. My question is, how many times does that have to happen before we declare a real crisis? To me, the single biggest risk we face on something like that is not taking advantage of the incredible momentum we have on wireless. We have this wonderful market-based solution called incentive auctions.

MR. RUBENSTEIN: Let me ask you: In terms of mobile, a lot of people are buying things on their mobile telephone devices now, and, presumably, you believe that that is a good thing, I guess – using the Internet. Do you think there should be a tax on Internet purchases?

MR. GENACHOWSKI: (Chuckles.) You know, we don't deal with Internet tax issues –

MR. RUBENSTEIN: Just tell me your personal view. (Laughter.)

MR. GENACHOWSKI: I think anything that discourages innovation and private investment in this space, we've got to look at really carefully before we take any chances with it.

MR. RUBENSTEIN: And the payments of – there's controversy, I guess, over who's going to regulate the payment methods, if there are payment methods, when you're buying something – not the tax, but just the payment. Is that something that the FCC is going to regulate? In other words, the way that mobile transactions are – payment are made for those – are you going to regulate that, or who regulates that?

MR. GENACHOWSKI: We don't have any open proceedings on this. The premise of your question is one I agree with, which is that this area of payments is a tremendous economic innovation opportunity. It fits into a bucket where there are a number of different agencies that are like the people feeling the elephant. I think as a government, we have an obligation to coordinate and make sure that, to the extent that rules and policies are required, that they're smart, they're efficient, they're coordinated, and that we're helping mobile payments take off.

This is another example of something where, if we don't get it right, we'll see the leading innovators in mobile payments develop in another country.

MR. RUBENSTEIN: Right now, you have a lot of proceedings in front of the FCC and presumably you want them to be as technologically efficient as possible. Why do you not just say, no more paper filings, everything has to be electronic?

MR. GENACHOWSKI: This is a question we wrestled with when we did our national broadband plan last year. We put together a strategic plan for the country on broadband and, of course, we put it online, and we made it interactive, and we ran the whole process online so we could get a lot of input, but we did print books. Not un-thick, a couple hundred pages – Erik Garr is here, who really helped – how many pages was it?

AUDIENCE MEMBER: (Off mic.) Two hundred and sixty-seven.

MR. GENACHOWSKI: Two hundred and sixty-seven pages. (Laughter.) And so people asked: It's a broadband plan; why are you printing it?

MR. RUBENSTEIN: And the answer is?

MR. GENACHOWSKI: The answer is that one of the strategic challenges we face as a country is that the percentage of Americans who are online is much lower than it needs to be. In the U.S., the broadband adoption rate is 67 percent. So one-third of Americans are not online. Sixty-seven percent, by the way, compares to 90 percent in Singapore and South Korea. One of the things that we need to do is pursue a set of strategies to increase broadband adoption in the U.S.

But, the thing that we realized was, as your question pointed out, once we move to full e-government, we'll save a tremendous amount of money for taxpayers, and we'll run government more efficiently. The problem is, until we do that, government actually has to run – and some companies have to do this too – two infrastructures because until we get all citizens online, we have to do paper as well as the electronic to serve all our citizens. It's crazy, but it's why taking real measures to accelerate broadband adoption has a double payoff for the country.

MR. RUBENSTEIN: Twenty percent of Americans don't have access to broadband at all.

MR. GENACHOWSKI: A little less.

MR. RUBENSTEIN: Less than that? And what percentage is it, would you say?

MR. GENACHOWSKI: It's actually – it's under 10.

About 25 million people live in areas that have no broadband infrastructure at all.

MR. RUBENSTEIN: And what are you doing about that?

MR. GENACHOWSKI: All of these different topics kind of fit under the heading in our space called “universal service.” We did a very good job in the 20th century doing universal service for telephone service.

Problem is, our universal service programs are still telephone programs. They’ve also gotten inefficient, wasteful; they’re not allocating funds very wisely. So this is a core recommendation of the broadband plan along with incentive auctions and other spectrum issues.

We’ve got to transform this \$9-billion-a-year fund for universal service into one that’s efficiently focused on the next generation of communications infrastructure – broadband. One that’s using market-based mechanisms to disperse funds, that’s efficient, that’s fiscally responsible, and accountable. I think we’re going to get there.

I have to say that some of my predecessors have tried this, and I now understand why it was so hard for them. It’s complicated and challenging. I think we’re going to get there.

Many of the people here probably read a book called “Innovator’s Dilemma.” It’s a book that analyzes why market-leading companies can sometimes succeed and sometimes fail when they’re faced with disruptive technologies and disruptive competitors. It’s a good frame for thinking about where we are as a country when it comes to communications technology.

We’re the market leader. We did a great job in this country in the 20th century. But, the U.S. is like some the market-leading companies that have trouble adjusting to new circumstances because they’re not operating on a blank slate. They’ve got to make transitions from legacy infrastructure from older policies and processes.

This is what we have to do as a country in a number of areas – spectrum, universal service. We have to recognize that we have real issues. It comes down to the series of positives for the U.S. So many successes in the broadcasting industry have made this issue harder. It’s a good thing; it’s also a challenge. Same thing with universal service.

But if we don’t tackle these issues in the way that the great companies tackle their disruptive competitors and technologies, the risk we face as a country is that we’ll end up like the companies that don’t make the turn, and don’t continue to compete in a new era.

MR. RUBENSTEIN: Why shouldn’t the government do the same? The FCC was set up in 1934 with five members. Why not just have one administrator and let him or her make the decisions – set the policies without having to go through these votes and lobbying other members and so forth? Why don’t you have a more efficient way of doing this?

MR. GENACHOWSKI: I’ll tell you one thing about the FCC that’s interesting historically. It’s an accident, but it actually gives us a competitive advantage if we get our job done right.

In most countries, there are multiple agencies that do what the FCC does. There's an agency that does wired communications, there's another one that does wireless communications, there's another one that does international and satellite.

Thanks to the accident of history -- and Herbert Hoover -- we've had from the beginning what around the world they call a "converged" agency. For many years, you'd wonder why all these things were together, but now it makes a lot of sense. Because all of these different means of communication are basically different mechanisms for transmitting digital bits, it should give the U.S. a competitive advantage in looking holistically at policies that really relate to each other.

There are countries around the world, our global competitors, who want to move their countries to converged agencies. So one of the things that we do focus on is taking advantage of this competitive advantage that we have to make sure that we are adopting rules and policies that make sense across multiple platforms.

MR. RUBENSTEIN: So you think the U.S. has a more efficient system than other countries have?

MR. GENACHOWSKI: I think a converged agency absolutely makes sense.

MR. RUBENSTEIN: When you make a decision in the FCC, traditionally I would guess, the FCC commissioners would say, well, this is competitive or it's not competitive or it's pro-technology or not. But do you weigh in what the impact is on other countries, or abroad? In other words, will this make the United States more competitive versus China or other countries?

MR. GENACHOWSKI: Absolutely. We can't disentangle what happens in our economy from what happens in the global economy. Twenty-five years ago when Congress authorized the FCC to conduct auctions, interestingly at that point there was a delay before that process was adopted. There shouldn't have been, but there was.

The costs of delay then were much lower than now. Because back then, the fact is, around the world countries weren't waking up every day and saying, we want to take the lead in innovation and we've identified spectrum in mobile as an opportunity. Today, the fact is, that all the major economies around the world, as I said before, understand this.

We can't look at our own economy, consider what we need to do to make sure the U.S. takes advantage of all our incredible advantages to lead the world in innovation and entrepreneurship in the 21st century, without paying attention to our global competitors.

MR. RUBENSTEIN: Now, since we started selling spectrum, I think the U.S. government has brought in about 50 billion dollars, more or less. Fifty billion dollars. How much more money is there to be brought in by selling additional spectrum? Is it another 50 billion or is that too high?

MR. GENACHOWSKI: Well, the incentive auction proposal that I mentioned has been scored by the people who do these things in the 25- to 30-billion dollar range. Not a small

number; I believe it's in both the president's budget and the Republican budget. As I said, it's something that we should move forward on and do. It's a bipartisan strategic issue that's important for our economy.

MR. RUBENSTEIN: Do you think you have to be a lawyer to be the chairman of the FCC?

MR. GENACHOWSKI: (Chuckles.) No, and I think – it gets at another thing that I try to focus on in running the agency. There are very few issues that we work on where you'd want only lawyers to work on them.

I am a lawyer, I was trained as a lawyer and I have nothing against lawyers, but the best work that's done by the agency is work that is multi-disciplinary. This is going to sound like a joke, I don't mean it this way – but the best work is done by a team with a lawyer, an economist, an engineer, people with real-world investing experience, people with real-world experience in education or health care.

This is the most fun that I have in the job – when we actually get people from multiple backgrounds and disciplines together and have really intense vibrant discussions about what the right thing is for the country.

This is something I've learned from all the people you mentioned at the beginning –the importance of encouraging those kinds of conversations, encouraging intense back and forth, but also of having real respect for multiple perspectives and disciplines. I think that it's really important for the FCC has all those disciplines and backgrounds represented.

MR. RUBENSTEIN: Are you influenced by grassroots letters – people who send in letters from around the country? Are you influenced by members of Congress when they send letters? I assume members of Congress send a lot of letters, but how do you treat those letters? Do you respond to every letter, do you meet members of Congress? Do members of Congress come down to lobby you on issues, or are they not allowed to do that?

MR. GENACHOWSKI: Sure, we spend a lot of time talking to members of Congress. It's very, very important especially on issues like broadband that are so important to our economy. This area is a sixth of our economy. The FCC as the expert agency has a real obligation to be a resource to Congress, a resource to the Administration. It's incredibly important.

We run open processes. We're required by the Administrative Procedure Act and other things to do so. And, we pay a lot of attention to the input we get from all stakeholders. What I tell the team is that great ideas can come from anywhere; bad ideas can come from anywhere. Let's make sure we know what we're trying to accomplish, what the shortest distance is to get there, and be sensitive about the different perspectives that we fortunately have coming into the FCC.

MR. RUBENSTEIN: And the White House doesn't call up and say what their position is on net neutrality or other things; they don't really haul you over there and tell you what to do? Or, what happens?

MR. GENACHOWSKI: We're an independent agency. We do what we believe is the right thing for the country. – We've disagreed with almost everyone you can mention and we've agreed with them over time. That will continue to be the case.

MR. RUBENSTEIN: There's a story you may have heard of where a former chairman of the FCC was doing something that President Reagan or some of his advisors didn't like so they brought in all the movie studio heads who didn't like this particular proposed regulation to the Oval Office.

The president walks in and says, "Well, if I could have gotten a meeting with any of you when I was an actor, I wouldn't have had to go into the political world – (laughter) – but I could never see you guys when I was an actor." I guess the FCC chairman wasn't in that meeting, but I think the White House more or less told the FCC chairman not to proceed with that change. But you don't have that kind of situation now.

MR. GENACHOWSKI: No.

MR. RUBENSTEIN: Now that you know what it's like to be the chairman of the FCC, knowing everything you know, would you have taken the job?

MR. GENACHOWSKI: (Laughter.) Yes. I think the issues that we've talked about – they're very, very important for the country. They're interesting, exciting and, if we get them right, really matter to our economy. They'll matter to ordinary Americans. There are things like digital textbooks that we didn't talk about; other ways that communications technologies can make a difference in daily life.

MR. RUBENSTEIN: Digital textbooks – is that the idea that a student, let's say in high school or something like that, might have to carry around 50 pounds of books, but if he or she had a digital textbook system they would just use a screen? Is that going to happen or not?

MR. GENACHOWSKI: I think it's going to happen. I think anything we can do to accelerate it would be a good thing. It's not just about heading off shoulder problems for our young people. Technology here can be a real opportunity, an equalizer for students all over the country and a force multiplier for teachers.

When you think about the power of these devices to help -- on an individualized basis -- students, wherever they are learn geometry faster, science, math, all these subjects. The opportunities are immense.

I think we should be the first country in the world to move from paper textbooks to digital textbooks and I think we should lead the world in innovation in this area. I think we have a chance to do it but, as in other areas, there are some real obstacles to overcome.

MR. RUBENSTEIN: There have been some rumors that you might take another position in this Administration.

Are you planning to stay as chairman of the FCC for the foreseeable future?

MR. GENACHOWSKI: I am very focused on what I'm doing every day. The things that I described to you – our agenda. For the next year and beyond, I'm going to keep on waking up every day working on it. I enjoy it and, as I said, I think it's very important that we get these right.

MR. RUBENSTEIN: We have some time for some questions from the audience – just a few minutes. If you raise your hand, I think there should be a mic. You can identify yourself if you're not afraid to do so. (Laughter.) No lobbying, though.

Questions? There's one right here.

Q: Thank you. Good afternoon. I'm Greg Garcia with Bank of America, Mr. Chairman. As we all know, our computer and communications infrastructure nationally is under constant threat of cyberattack.

Just about a year ago, the FCC issued a notice of inquiry about the possibility of developing a cybersecurity standard and certification for communication service providers. What over the past year have you learned through that process? What is the status of that?

MR. GENACHOWSKI: I'm glad you mentioned it for a whole series of reasons. Obviously, the security of our broadband infrastructure is just vital for our economy. From large businesses to small, people need to be able to trust that their information will be secure and protected.

I guess I'd make two points in response: One is that there are a number of different agencies – we talked about this in connection with mobile payments – that have some expertise and some relevance to the solution. I think it's very important in this area, as in the other one, that government as a whole act in a smart, coordinated, efficient way. That's why a cybersecurity adviser was appointed in the White House; I think it was the right thing to do. And so the interagency efforts to tackle this are ongoing, they're very important and they're not easy.

There are some steps that we can take that we are looking to do; I'll give you one example: There's an incredible opportunity in small businesses going online, taking advantage of the opportunities that the Internet, wired and wireless, allows to expand markets and lower costs, right? – through services in the clouds. Broadband adoption among small businesses isn't as high as it should be to fully take advantage of these opportunities. And we've looked at why that is. There are a number of different reasons, but part of it is concern about the infrastructure.

Next month, we're going to launch an initiative – together with other agencies and companies in the private sector – to increase the level of education, knowledge and awareness among small businesses of the basic steps that can be taken to protect themselves.

There are a lot of things that I suspect many people in this room take for granted – don't click on a link in an email from someone you don't know. That's not common knowledge; it should be. Over the next month, you'll see us announce an initiative to focus on small businesses and security as we continue to work on the notice that you mentioned, and as part of an interagency process, to make sure the country gets this right.

MR. RUBENSTEIN: Okay; other questions? Back there. Sir, identify yourself.

Q: Mr. Chairman – Bruce Tanous, J.P. Morgan. My question is, the low usage in the United States of Internet technology, relative to our peer countries – how much of that is driven by the cost to the individual consumer?

MR. GENACHOWSKI: We found in our work that there were several different contributing reasons. In some cases, they're kind of independent reasons; in others, they relate to each other. Affordability is a reason and, for some people, it's the dominant reason. But we also found that relevance was an issue. There are some people who don't appreciate the value of being online. There are steps we can take to accelerate that. Digital literacy is an issue. There are some people who don't have the skills to be online. There are steps we can take to address digital literacy.

Trust is a fourth reason. There are some people who just don't trust it. We need to work on all of these in part because the costs of digital exclusion are much higher than they used to be and they're getting higher.

I'll give you one example. Think about jobs. It used to be, if you were looking for a job, you'd get the newspaper, you'd look at the help wanted ads. If you saw something, you'd call up and maybe you'd schedule an appointment or an interview or you'd fax over an application or a résumé. We all know that that's not how it works anymore. Overwhelmingly, job postings are moving online. In fact, more than three-quarters of Fortune 500 companies do all of their job postings online. So if you're not online today, you can't even find a job.

I also talked to a lot of people on the other side who say that obviously we need to create a lot more jobs in this country. But there are also jobs that do exist that require basic digital skills. And some employers are having trouble finding people with basic digital skills to fill jobs that are available. In both of these respects, the costs of digital exclusion are much higher than they used to be. I can tell you the same story around education, around health care. It's why it's such an imperative for us to bring up these numbers.

MR. RUBENSTEIN: By the way, speaking of new technology, President Obama recently said that he found that the telephone system in the White House was kind of antiquated. And he just was surprised at how antiquated it was compared to what he expected. Have you been asked for any advice on how to improve the telephone system there?

MR. GENACHOWSKI: (Chuckles.) Fortunately the FCC is not in that business.

MR. RUBENSTEIN: Are you happy with your telephone system at the FCC?

MR. GENACHOWSKI: We've taken a number of steps over the last year to make better and more efficient use of communications technologies. It's really important, not only to lower the cost of government – because we can lower cost by using cloud-computing smartly and other new technologies. We can generate more efficiency and productivity in government – and, to come back to the adoption point – there's the kind of double bottom-line of this, that by accelerating the move to e-government and generally the use of new communications technologies across government, we'll help increase our adoption rate, because it's often the people who most interact with who are the ones who are online the least. And so, thinking creatively about bringing these things together, we can get the government to operate more efficiently, provide more information more productively, and do it in a way that brings more people online. It's like incentive auctions, if I can plug them again. It's another example of win-wins where we just need to do some of these things, and we can – and we're doing a lot of them, by the way. But, there are terrific examples in the spaces, why I like the spaces, where we can do things that have wins on multiple levels -- for our economy, for education, for raising revenue for the government and lowering its cost.

MR. RUBENSTEIN: OK, we have time for one more question. Anybody else? Question?

All right, well I'll ask the last question then. My question is, today, when somebody wants to influence the FCC – a citizen, average citizen – what is the best way? Is it to write a letter, send an email, come to Washington? I mean, assume they don't have lobbyists and so forth. How can an average citizen actually affect what the FCC does?

MR. GENACHOWSKI: For people who live outside Washington, online is the best way. We've made it very easy for people outside of Washington -- whether you're an ordinary citizen, a teacher, a small business person, an engineer or economist in a large company, someone at a university -- to not have to hire a lawyer in Washington to kind of present your facts and data and ideas, but to do it directly online. And we changed our rules so that online submissions count as part of a record, which imposes an obligation on us, to take them into account as we make decisions.

So I encourage everyone to go to fcc.gov. You'll see a link to a beta site. We're in the process of re-launching our site to make it more helpful to all of the FCC stakeholders in terms of providing information and also getting input.

That's the way to do it, but we will also look at the people who don't have online access. We'll look at other information that comes in as well.

MR. RUBENSTEIN: All right, well I'd like to thank you, Chairman, and on the behalf of the Economic Club of Washington I want to thank you for a very interesting conversation. I want to give you a gift that's a little map of the District of Columbia. I hope you're allowed to take a gift.

MR. GENACHOWSKI: I'm not sure! Josh? (Laughter.)

MR. RUBENSTEIN: It is an original map of the District of Columbia.

MR. GENACHOWSKI: Oh, that's great. (Applause.) Thank you very much. Thank you.