

MODERATOR: It's 10:00, so I think we should begin.

As soon as that nice mellow music ends.

Good morning, my name is Bob Atkinson.

I'm the Director of policy research at the Columbia institute for teleinformation at the Columbia business school in New York.

I am here today as the moderator of this roundtable.

I am not an employee of NTIA, RUS, or any other government agency so any comments I make here today are strictly my own.

They are probably not even -- couldn't even be attributed to Citicorp or Columbia university.

Today's or this morning's first roundtable is on the topic of nondiscrimination and interconnection obligations.

We have a number of representatives

from stakeholders on this issue who are going to share their thoughts and recommendations.

Each of the panelists are going to make some very brief comments.

And then I will moderate a roundtable discussion amongst them.

And the last 30 minutes of the program will be devoted to questions to the panelists or comments from the audience here at the Commerce Department auditorium or from the webcast or teleconference.

If you are on the webcast or teleconference, please send those questions and comments in.

And I will read them when they arrive.

As an observation I have been doing this now -- this is the third day of these hearings here in Washington, with two on the road in Arizona and Nevada last week.

It's an open and transparent process where all and any interested parties

are very welcome to share their views, recommendations, et cetera with NTIA and RUS.

This whole process is working hard to develop a means for efficiently and effectively full filling the dictates of the American recovery and reinvestment act, ARRA, the broadband stimulus portion of that. You may know, but if you don't but RUS and NTIA made available a request for information almost two weeks ago and that is a fairly detailed document, has lots of questions, it's a good vehicle for providing input.

The deadline for providing input is April 13.

Please take advantage of the RFI and RFI process to provided an additional inputs and comments and thoughts.

Let me introduce our distinguished panel this morning.

On my immediate left is Ben Scott.

Ben is the Director of -- policy Director at Free Press, a national nonprofit public interest organization.

He oversees all governmental relations for Free Press and regularly testifies before Congress and the FCC.

Before joining Free Press, Ben was legislative aid for then representative Bernie Sanders of Vermont.

To Ben's left is Gigi Sohn.

Gigi is the president and cofounder of public knowledge, a nonprofit organization that addresses the public state and the convergence of communications policy and intellectual property law and as president she serves as PK's chief strategist, fundraiser and public face.

She is is senior adjunct fellow at the flat iron center for law and technology and entrepreneurship at

the University of Colorado and is a senior fellow at the University of Melbourne faculty law studies program in Australia.

To Gigi's left is James Assey.

James is the executive Vice President for the National Cable and Telecommunications Association, the principal trade association of the cable industry which is the nation's largest provider of high speed internet access.

Prior to joining NCTA in February of 2008 he was the senior democratic counsel handling media issues to the U.S. Senate committee on commerce, science and transportation.

To James' left is Chris Guttman-McCabe.

Chris is Vice President for regulatory affairs at CTIA-The Wireless Association.

In that capacity he coordinates the association's regulatory policy, advocacy, addressing issues

involving spectrum, regulatory mandates and homeland security.

To Chris's left is Jonathan Banks.

Jon heads the law and policy group at the U.S. telecom association which represents service providers providing broadband, voice data and video services over wireline and wireless networks.

Before joining U.S. telecom, U.S. federal regulatory policy on a broad range of issues including broadband and universal service and worked on competition enforcement and policy at the federal trade commission.

To Jon's left is Kevin Werbach, professor at the whether or not Boston school, University of Pennsylvania and organizer of the supernova conference he served as technology at the FCC during the Clinton administration.

And last but not least KC Claffy.

Founder and Director of the Cooperative Association For Internet

Data Analysis based at the University of California's San Diego supercomputer center.

And she is an adjunct professor in the computer science and engineering department at UCSD.

She directs kids in collecting and organization of strategic internet sets and developing tools for analyses and technology to improve research and more informed engineering and policy decisions regarding internet infrastructure. NTIA and RUS have a monumental job to accomplish in a very short time period, implementing the ARRA act in the way that provides the greatest broadband bang for every taxpayer buck.

Among other things this means adopting rules, developing contracts, soliciting proposals, selecting proposals perfecting goals that satisfy the act.

It's a monumental task ahead of

them.

So the purpose of this series of ROUNDTABLES is to provide NTIA and RUS with the considered thoughts and suggestions of experienced experts from a broad range of stakeholders so they can accomplish their task as quickly and effectively as possible.

As I mentioned moment ago, the topic of this roundtable is nondiscrimination and interconnection obligations.

This is an important subject with respect to the overall broadband stimulus program because the ARRA requires NTIA in coordination with the FCC to publish the nondiscrimination and internet interconnection obligations grants and at a minimum these must require adherence to the broadband principles.

For those not familiar with these principles, they are that consumers are entitled to access to lawful

content of their choice.

Consumers are entitled to run applications and use services of their choice subject to the needs of law enforcement.

Consumers are entitled to connect their choices of legal devices that do not harm the network.

And consumers are entitled to competition among network providers, application and service providers and content providers.

And the FCC said that these principles are subject to reasonable network management.

So the topic here is to help the NTIA develop contractual terms consistent with the act's requirements.

So let's begin with Ben Scott.

MR. SCOTT: Good morning.

Thank you for the opportunity to be here today.

As a consumer advocate it is with great pride that I take part in this

roundtable.

To make no mistake we are participating in a milestone event in internet policy making for the first time since the misguided proposals of the 2000's we have clear instruction from the Congress and president to safe guard the internet for internet users.

The NTIA and FCC.

MODERATOR: Excuse me.

Put Ben's slide up, please.

Ben been thanks for catching that, Bob.

MR. SCOTT: The NTIA and FDIC and they will do so to ensure that funds by taxpayer dollars.

My slide does not contain a proposal for legal language.

Free Press recommended text putting angels in the details which we will submit for the record.

I have chosen to focus on big picture principles, the basic ideals that should guide our thinking.

First and foremost accountability. The federal government is not a charity.

It is an investor.

What's more it's a socially responsible investor.

Taxpayers put money into broadband infrastructure only insofar as it serves the public interest.

This is not a blank check we are buying public service for grant recipients for this investment.

That leads to the two most common questions in Washington today, what should we buy with taxpayer dollars and what are we getting for our money?

So first, what are we buying?

The law says we are buying an open and non-discriminate core internet.

That may sound like a daunting challenge as a legal framework but it is familiar terrain for those of us who have been debating this issue in tortured detail for some years

now.

When it comes to the open internet, the voice of the consumer is clear and unequivocal.

In the last week almost 15 thousand of my own members have sent letters to the NTIA calling for strict nondiscrimination protections.

I have brought their names with me today to demonstrate that support and to deliver their message.

Perhaps only some of these 15,000 understand the mechanics of the law, but they understand what it looks like in practice, so what does it look like to the average internet user?

Interconnection simply means that all networks that make up the internet should be linked and interoperable.

Including wireless.

Nondiscrimination, it's a simple principle that every web surfer takes for granted, that means

control over the content and services of the internet should lie with the open market of consumers and producers not the monopoly of the network companies.

There should be no unnecessary discrimination between different kinds of online content.

It's basic and fundamental and it does not lend itself to half measures.

So let me finish with the answers to my second big policy question.

If we successfully open the deployment of open and nondiscriminatory networks, what are we getting for the money?

The openness of the internet is the core feature to permit this technology to become the greatest engine of free speech and commerce since the printing press.

It fuels the creation, job creation and growth that is essential for our society.

It is not only fitting and proper that is we should protect the internet built with taxpayer dollars, it is essential if we are going to honor the dual goals of economic stimulus and public service required by the law.

This is the first opportunity for this administration to set a new high water mark for consumer protection on the internet.

I urge you all to act wisely and decisively.

I thank you for your time and attention and look forward to your questions.

MODERATOR: Our next speaker is Gigi Sohn.

MS. SOHN: Good morning.

Thank you, Bob, and thank you NTIA for inviting me to speak at this roundtable.

Plain Language of the American recovery and reinvestment act

requires those who receive grant moneys from NTIA to use them for networks in a nondiscriminatory and interconnect with other networks.

With this language Congress express add clear preference for open networks which have been the driving force between the kind of innovation, job creation and economic empowerment that is at the core of the stimulus bill.

Public knowledge believes in exchange for extraordinary government benefit, grant recipients must not degrade, prioritize or discriminate against any lawful content, application or service transmitted over the recipients internet access service subject to a rule of reasonable management.

Nondiscrimination was a core requirement for communications networks for 70 years.

Indeed, it was the first thing Congress put into the communications

act of 1934.

The FCC's four principles are insufficient to ensure nondiscriminatory networks because they do not address cases where a network provider prioritizes or favors certain content services over others.

Thus with urge NTIA to ensure that there is an explicit prohibition and to ensure that it is nondiscriminatory.

The interconnection requirement which is often not talked about is equally important.

NTIA should craft a requirement that is consistent with section 251 C of the communications act.

This would require a grant recipient to provide interconnection at any technically feasible point within the requesting providers network that is at least equal in quality to that provided to any other party, nondiscriminatory rates, terms and

condi ti ons.

A grant reci pi ent would al so be required to provi de unbendl ed access or permit line sharing for competi tors.

For wi rel ess carriers, interconnecti on should i ncl ude roaming negotiated at commerci al ly reasonable rates.

The sti mul us bi ll commands the Royal uti li ty servi ce to give pri ori ty to appli cants that would deli ver consumers of choice for a local servi ce provi der.

We see no reason why NTIA should not do the same.

Thus, we ask that NTIA pri ori ti ze project that i s bui ld shared i nfrastructure.

Ep i n cl o si ng, I want to address the main argument that large network provi ders make against nondi scri mi nati on i nterconnecti on requirements, that they somehow wi ll deter provi ders from i nvesti ng i n

their networks.

But the evidence is to the contrary.

For the 70 years that the law required nondiscrimination, network providers invested.

Someone said they even over-invested in their networks.

Today large network providers claim that their networks are open, yet they continue to invest.

For example, AT&T recently announced that in 2009 alone it will invest between 17 and 18 billion dollars in its broadband infrastructure.

Clear wire, a smaller wireless network provider which has a business model based on openness is invested between 1.5 and 1.9 billion dollars in 2009.

And as important, nondiscriminatory networks encourage investment for the content services to add to the network and this investment makes those networks more valuable.

Without the investment at the edge,

the internet would not be the critical infrastructure that it is today.

I thank you and look forward to your questions.

MODERATOR: Our next speaker is James Assey.

MR. ASSEY: Thank you, Bob.

And thank you, to NTIA for inviting us to participate.

In the brief minutes I have, I just want to really highlight two points that are embodied in the slide above to talk about the nondiscrimination and interconnection conditions that will attach to stimulus grants.

And I want to emphasize stimulus, because I think we all are supportive and we are hopeful that these funds will be used to expand broadband access in areas where it does not exist today or to close the adoption gap in those communities where broadband may be available but nevertheless, for some reason or

another, households choose not to subscribe to it.

But I think we need to recognize that all of this is in the context of a much larger public purpose, a purpose that was embodied in section 2 of the act, which specified that the funds were being provided to preserve and create jobs, to promote economic recovery, and to assist those impacted by recession.

And in furtherance of those public purposes, Congress further called upon the agencies to distribute funds as quickly as possible consistent with prudent management.

And in that light, I think we need to consider the desire for rapid deployment of funds, and recognize the fact that that councils for some humility and discrimination when we think about internet conditions because at the end of the day, if we impose new and untested requirements as a condition of stimulus funding,

one concern is that we risk injecting contentiousness, uncertainty and delay into a process that really should be focused on creating jobs and increasing availability and spurring adoption. If we go beyond the status quo in layering on new and untested conditions, we are going to deter the very people that are best positioned to roll out broadband infrastructure in unserved areas and to focus on strategies that whisper adoption.

That's why specifically NCTA would recommend that as the agencies consider how to implement these conditions, that we borrow from the status quo.

That we essentially make a condition, the 2005 policy statement with respect to nondiscrimination and that with respect to interconnection we -- we read that to basingly require direct or --

basically require direct or interconnection for broadband providers.

I think those types of interpretation will best position us to get the money out the door in the hands to where it would be put to its best and highest use.

Thank you very much.

MODERATOR: Thank you.

Our next speaker is Chris Guttman-McCabe.

MR. GUTTMAN-MCCABE: Thank you, Bob and thank you NTIA and RUS for this opportunity.

The ARRA act through the broadband opportunities program is designed to provide access to broadband services that will boost economic opportunities in a number of areas including healthcare, education, and the overall development of the economy.

Essential goal underlying the program is to ensure the expeditious

efficient utility l i e s a t i o n o f stimulus funds to facilitate broadband projects that will enable businesses communities and consumers to realize the economic benefits of these opportunities.

On Friday president Obama told state legislators that decisions about how stimulus money will be spent will be based on the merits of creating the most jobs and helping reverse the recession.

That needs to be the focus here.

While careful consideration must be given to how to define the requirements for recipients, it must be balanced against the need to create jobs, to stimulate the economy, and to foster broadband deployment to unserved and underserved areas.

With that balance in mind to achieve the goals of stimulating the economy and advancing broadband deployment, it is not necessary to decide the

details of particular
interconnection scenarios.

NTIA should, however, recognize that
interconnection to the public
network will facilitate the goal of
ensuring that all Americans enjoy
the benefits and opportunities of
expanded broadband access.

Further, NTIA, and FCC and RUS
should be wary of defining and
possibly expanding nondiscrimination
rules for broadband providers.

This section of the ARRA should not
be read to expand the traditional
telecom obligations beyond their
current applications.

The goal is to stimulate the economy
and stimulate broadband to unserved
and underserved areas not to spend
the next several months debating
these issues as Bennett said, in
tortured detail.

President Obama in his inaugural
address spoke of a new foundation
for growth.

He spoke of necessity of greater broadband access to revitalize the nation's commerce and bind us together.

After signing the act, the president said, quote, this does not mark the end of our economic problems, no does it constitute all that we are going to have to do.

This marks the beginning of what we need to do to create jobs for America.

That is administrator Gomez, COPPS and others have said, successful measure is the creation of jobs, let's not lose sight of that focus and the necessary steps we need to take to tackle this problem.

Thank you.

MODERATOR: Thank you very much.

Our next speaker will be Jonathan Banks.

MR. BANKS: Thank you, Bob, and thank you for the opportunity to be here.

I would like to make a couple of points about this issue.

The first one I think we all agree on is that the ARRA was enacted with the goal of creating jobs ASAP and promoting economic recovery asap.

NTIA's piece of this effort is to take moneys allocated to it and spend it on a broadband program that will aid job creation and economic stimulus by increasing the adoption and use of broadband and broadband technologies.

We are here to today to talk about the interconnection and nondiscrimination.

Our view is that there is an expert in this field, the FCC.

They have been considering these issues for years.

They continue to consider them and they have a policy statement that sets the right approach.

That policy statement, Bob, is gone through, but the commissioners at

the FCC at the time viewed that policy statement as the best way to promote the open and interconnected nature of the internet.

It speaks directly to the statutory language in the ARRA, and NTIA's mission here.

And if anyone is in a place to continue considering that, that language, it is the FCC, an agency with lawyers, policymakers, engineers and economists and substantial resources to devote to that task.

And most importantly the FCC has time that NTIA and RUS don't have to implement this program.

Now the broadband and internet under the FCC policy statement has thrived.

If you look at the sector, the ICT, the information communication and technology sector, it now accounts for almost 8% of our economy.

It provides half or more of

productivity growth in our economy. These are essential things if we are going to get out of this economic situation we are in.

The sector produces high quality jobs.

There are over one million jobs in the telecommunications sector.

Half a million of those are in the wire line sector.

These are among the best jobs in the country.

They are solid jobs, high paying and high-tech.

Innovation under the policy statement has thrived.

Facebook, YouTube, you name it, has surfaced over the last few years under the policy statement.

Broadband connections have doubled in the two years following the adoption of the policy statement from about 40 million to about 80 million, and in the last couple of years, wireless broadband has

skyrocketed, and is becoming a major force as people walk around with their I-phones downtown or at the airport.

We think it sets the right tone, balances the needs for consumers, application providers and broadband providers with the results I have mentioned to you.

We see more rules as contrary to the purposes of the ARRA, and to reaching the unserved.

I mean we do have to step back and remember that what we are talking about is building broadband networks and connecting broadband users that are among the most difficult to serve.

We are talking about geographies in the far west that are mountainous extremely rural, we are talking about difficult areas in the east that have challenging terrain of their own.

These are projects that I can't get

built today and aren't going to get built today without government support.

The idea that we should lay additional and unknown regulations on top of the task of the people that will be getting this grant money is I think troubling at best. You need to build broadband to these people and we don't need to praise the potential costs of doing that. Now the program will take care a lot of the capital costs of doing this, but capital costs are a proxy for operating costs and the operating costs of maintaining these networks and providing broadband in these areas are very, very high.

Additional costs and additional risk are not helpful to getting broadband out to these, the most difficult areas to serve in the country.

So our feeling is that it's time to get on with the task of getting these broadband connections built

and getting these new users on to the network.

And the best way to do that is to keep our focus on getting the money out to the right places and not on adding cost and complexity to the scheme.

Thank you.

MODERATOR: Our next speaker is Kevin Werbach.

MR. WERBACH: Thank you to NTIA for inviting me to this community.

Let me just add a couple points to this exceedingly intense slide I have up here.

No matter how clearly the rules are drafted for the stimulus program, so long as the program gets off the ground quickly, grants are going to be played and money is going to be spent and the economy will be stimulated.

No matter how well the rules are written we will not be anywhere close at the end of our process to

achieving our broadband goals.

This money is just a down payment on that. What will endure from this exercise is whether or not the program establishes two principles. First, that public benefits should flow from expenditure of public capital, and second that investment and innovation are greatest when they are allowed to come from anywhere in, on, and around open networks.

As I discussed in the law review article called "only connect" it is there in the middle of the slide, nondiscrimination and interconnection are two of the key things for providing the networks.

While nondiscrimination is the focus of policy and political battles today, independent connection is also critical.

A well designed interconnection regime could be the best mechanism to facilitate competition and new

kinds of services.

We should not forget that the FCC policy statement includes a principle that users are entitled to competition at every layer.

That can't happen unless network platforms are fundamentally open and interconnected.

In writing these standards, let's not reinvent the wheel.

We have starting points in the communications act N the FCC's prior decisions, in the AT&T bell south case as well as the Comcast network management case.

We can look at how the rest of the world today manages bit stream access and line sharing almost universally for broadband access services.

We can look by analogy on how standards organizations implement the near universal requirement that technology underlying standards be licensed on a reasonable and

nondiscriminatory basis and we could look at how market participants themselves behave by giving customers and interconnection partners the most favored nation status vis-a-vis these existing relationships and agreements.

Finally as we saw within the 1996 telecom act, interconnection and nondiscrimination language is meaningless without effective enforcement mechanisms and a key element of enforcement is transparency and a key element of transparency is data.

KC will highlight this better than I K but it's impossible to assess what are reasonable, just and appropriate practices for both interconnection and nondiscrimination without knowing exactly how networks are built and operated.

So the grant should require meaningful open access and they should require meaningful data

disclosure if the benefits are going to flow to the American people from this program.

MODERATOR: Thank you and our last speaker is KC Claffy.

Dr. Claffy: Hi, I'm probably going to use quite a bit different language.

I live in a different world.

I have been trying to do internet science for the last few years or so which is challenging for the reasons Kevin mentioned.

It's difficult to get data.

So I will stay away from the reasonable discrimination sort of language except to mention the underlying empire Cal fact which I am aware of which it is hard to make Wall Street approve Martians by moving bits around -- margins by moving bits around.

And that's part of the problem.

We have an industry in a way that they are losing the main source of

revenue which is voice for many years, helped the revenues stay stable and it's been subsidizing internet infrastructure and now we are running out of that revenue because people are leaving voice over to the internet.

Another relevant empirical fact is benefiting from discrimination requires understanding what the traffic is. And understanding what the traffic is requires looking into the contents.

We can't tell much from headers.

So there is privacy issues there that we have not discussed in the policy community very much.

And the justification for this kind of discrimination really hasn't been provided in net neutrality terms so we don't know about the costs: I get that bit moving is a lower margin proposition than selling content but making rapid changes to the infrastructure that have already

been made to to the regulatory framework requires underlying justification and I don't think we have seen it yet.

Not only that but we have seen quite a bit of subsidy happening in the industry for the last 10 or 20 years.

Back in the '90s I remember learning that router vendors would subsidize providers especially back line providers with heavy discounts on routers or free routers.

Because we have extensive and poorly documented subsidies going on in the industry we realize that we are going to have to figure out how to structure the economics, it's an unsafe place to be if you are in regulation.

I don't envy you guys at all.

But one thing we do know is that the internet experiment itself required regulation that was much more stringent than anything being

discussed here.

I think you guys called it computer 2, sharing of fiber.

Today would be sharing of fiber.

Those regulations are all gone.

It's almost as if there was a group recognition that the internet was a mistake and let's not let it happen again.

Which is a big problem because the internet has a lot of structural problems and architectural problems under the hood that don't get talked about very much in the policy community.

It's technically dense.

So we are going to need some radical innovations to the internet in the next 20 years.

And we were not going to be in a position to make them.

So it's too little -- too short a timeframe to really make permanent decisions about how to achieve the goals that are even outlined in the

stimulus package, but this money is pretty important to put yourself in a position where you can say, write better telecommunications regulation later but I think we need a period of proven strength of the infrastructure.

I can talk about the problems that are under the hood of the internet architecture.

But historical reminder, first 30 years of its life, completely operated managed, funded by government, any data that came out of the internet in the first of the years was regulated.

And the data that I did my thesis on in 1994 was regulated by the national science foundation to be collected on the national science foundation and that went away in 1995, 1994 when I graduate there were no statutory requirements for any type of reporting from internet providers which hasn't helped

science very much and has been catastrophic for internet science.

There isn't a lot going on.

45 million dollars cyber security program at the national science foundation with no data from the operational networks.

There hasn't been.

The reasons for this and the reason I mention it here are not science reasons, they are policy and economic reasons.

There is a lot of legislative and political reasons to not share data that would need to be examined and it's expensive, it's incredibly expensive to gather data and collect it and find out what the right data is to collect and do legitimate analysis on it.

I want to mention, there is so many words on that slide.

I hope that NTIA considers

leveraging other sources of finding not just state funding and private

fund but the national science foundation got a couple billion dollars which is a lot of money for of the National Science Foundation so if the NTIA and RUS could arrange joint where they funded researchers to build measurement tools or transparency tools and NTIA funded data from providers to validate what these tools are measuring.

Because one of the big problems with researchers is they built tools to make inferences about the structure of the network, performance of the network, bandwidth, capacity, reach, and they can't validate what they infer because they don't have the truth from the providers.

So I think a joint partnership on some of these, not just NSF but DHS has similar problems when they are trying to fund cyber security now would create a lot of synergy.

MODERATOR: Thank you very much.

Now we will have a friendly chat

amongst the panelists.

Let me put out at least a theme at this stage to start off with of speed.

NTIA has to get this money moving out the door pretty quickly.

And in order to do that they have to have a consultation with the FCC on this topic of interconnection and nondiscrimination.

So among other things we need to help or at least give suggestions to NTIA on how to do these things relatively quickly.

One first thought I had was on the consultation with the FCC.

Do you think the FCC will have to have a traditional notice and comment kind of proceeding to do that consultation or how do you envision a consultation with the FCC happening speedily.

I know that is somewhat of the inside the beltway inside the FCC kind of or inside the regulatory

regime, but it struck me as a first step.

MR. GUTTMAN-MCCABE: I will take it first and Ben had referenced this and I didn't mean to apply anything.

MODERATOR: This is of course Chris Guttman-McCabe.

MR. GUTTMAN-MCCABE: These issues have been debated and again to use a term earlier in tortured detail for quite sometime.

The FCC has not come to any grand conclusion on how to apply these terms necessarily to particularly interconnection to broadband, so the notion that the FCC could do it quickly and do it in consultation with NTIA, and do it in such a way that funds will go out, the first batch of funding is expected to go out in April through June of this year.

You know, that's one of the concerns that we have, is that these have been debated under the noticing

comment, administrative procedure act process for years.

And the idea that we are going to accelerate that process and make a decision in the next weeks -- several weeks -- is concerning to us.

MODERATOR: Ben?

MR. SCOTT: Well, that's one way to look at it.

Another way to look at it would be that the FCC and Congress and all of us in the chattering classes who have been debating these issues for years, is that the record is very clear and the choices are very clear and the commission has in many cases merger agreements set policies out in extensive notice time period the way the law was written expressly requires the NTIA to set policy for interconnection and nondiscrimination.

To me they are drawing on a very rich record, it is not something

that they are pulling out of a hat and it can be done pretty straight forward manner in an explicit way.

MS. SOHN: I want to pick up on the theme of these are unknown regulations.

That these are some kind of mystery that NTIA and FCC have to be pulling out of midair.

I referred my talk to the internet -- interconnection requirements 251-C.

I think these are easily retrofitted for the situation right here.

As Ben said, we have years of legal history, we have legal precedent. We have years of debate.

There is really nothing new here.

MODERATOR: John?

MR. BANKS: Two things, first it's certainly true there have been years of debate at the FCC over these issues a couple thing come to mind. One is there is a nan decision at the FCC that the policy statement

promotes an interconnected and open internet and as I went over facts and figures the internet is open under that policy.

It seems to have worked so there is no reason to deviate from that in the next month without some real study.

Secondly, no one at the FCC has thought about what is the right openness policy to create jobs in an economic stimulus.

Now under the current approach, the telecom sectors have created a lot of good jobs and a lot of economic benefits for the country.

So again, if you were going to revamp this FCC policy for the purposes for the ARRA, you need to have economists and engineers looking at the pros and cons of changing that policy.

And just to step back a little bit, there is interconnection language in the '96 act.

Those of us who worked with that know that litigation over that language continues today, 12 years later.

The idea of opposing things like that in this program, I think what this will result in is those of you who have been here over the last few days, have you seen the broad range of entity that is are interested in grants to build out in these difficult areas.

They range from small telecom companies to rural economic development agencies to hospital groups, library groups, when those groups have to deal with rules like interconnection in the technical sense of the telecom act, they are going to send that to their lawyers, their lawyers are going to ask someone in Washington, what does this mean for a broadband network that I am going to try to run in this rural area?

The lawyers in Washington will say, "I don't really know, but here are the bad things that can happen."

That will do nothing but dissuade people from the actual business of building networks.

There is no exemption of FCC action.

If the FCC wants to change the policy statement next year, they can do so.

There is no need to rush to do something here that is going to penalize people who are trying to build out in the hardest areas.

MR. WERBACH: No matter what they will say this is a full employment act for lawyers.

The lawyers are going to get involved and we shouldn't think there is any way the rules can be written to be so transparently clear there would be no disputes. Just to get back to the questions. I think it would be totally impractical for the FCC to do a

notice and comment rule making proceedings to get to the point of consultation with NTIA on these grant rules.

That would take far too long.

And that's not what the statute says.

It says consultation.

So the commission is limited in terms of formally as the FCC proposing some binding rule to what they've adopted as commission.

But there can and should be and I expect there already are conversations at staff level as well as with the commissioners at the FCC, that should go on and further on the FCC should be proceeding, commerce has talked about that to look broadly at comprehensive rules. But it would be a mistake to make a legal interpretation that the grant program would have to wait for that kind of proceeding.

MODERATOR: Let me follow on, on the

timelines.

You have got consultation as a first step and the RFI's go out, the proposals come in, ultimately NTIA selects worthy grants and these interconnection and nondiscrimination provisions, whatever they are, are put into a contract.

Who enforces the contract?

MR. ASSEY: I think this highlights to what we were talking about.

We have a statute that we have that directs NTIA to do certain things I would council that the prop place to enforce provision would be at the FCC and quite honestly that's why the DIA -- MODERATOR: You are suggesting that if some -- you have two parties to the contract, NTIA and a grantee.

And if somebody -- I presume -- somebody who has legal standing to complain that the contract is being violated, the NTIA or a third party

they go to the FCC?

MR. ASSEY: I think what I am trying to say is we shouldn't reinvent the wheel, we should borrow from the process we V. That's why NTIA rather than go off on its own newly found untested policy should borrow what we have from the FCC.

That would seem to me given the interest of the speed and getting funds out to applicants as soon as possible that would seem.

MODERATOR: This is enforcement of contracts after they have been issued so it has nothing to do with getting them out the door, the grants out the door in the first place, it's after they are out, someone is alleging a violation of principle number 3.

Who vindicates that?

MR. ASSEY: I guess I would say to the extent there is a forum of the FCC's policy statement, it ought to be the FCC rather than NTIA.

MR. WERBACH: I mentioned this in my opening statements and it's critical.

The grants need to specify an enforcement mechanism and it shouldn't be uncertain.

It could be arbitration mechanism or some mechanism a regulatory organization that looks at these thorny network management questions and it should specify that nothing should be in violation of any rules the FCC adopts.

The FCC if it adopts any rules in this area it would be FCC wide, not just recipients of the grant money so the contracts should anticipate any possibility of conflicts down the road and should have a clause regarding later FCC development of rules but in the first instance they should provide an avenue for enforcement as opposed to letting it drop into the process.

MS. SOHN: This is another place

where we actually have some experience.

For years NTIA had the telecommunications opportunity program.

And there were guidelines as to enforcement for contracts as well.

Again, this is not something we have to necessarily make up from scratch, but NTIA itself could look to prior practice for its enforcement emphasis.

MODERATOR: The thing that struck me was that I guess the FCC has now had two proceedings, if I recall, on interpreting what is a reasonable network management practice, Comcast and things, and Cox and I believe that is roughly correct.

But in any case, it's sort of a case-by-case adjudication of the principles.

And I was certainly kind of perplexed trying to think how NTIA or the FCC would deal with or an

arbitrator, how about an arbitrator, Kevin, you suggested that.

So an arbitrator is going to begin to flesh out what these four principles mean.

But it would theoretically only apply to the contract in parts, but it has some precedential value.

MR. GUTTMAN-MCCABE: Writing or taking the policy statement or interconnection statement and turning that into contractual language that everyone is going to have to deal with is a difficult task.

You can attempt to show some of that litigation over those issues off to other people but as a contract with NTIA, there are a set of government rules around how you appeal contracts, the process is complicated.

And I think when you look at what's really going to happen here, money will go out to some small rural

broadband healthcare or hospital network for rural healthcare, a neighboring for-profit hospital will say, I want bandwidth on that network, and they will fight suit against the local community healthcare co-op and ask for broadband on that network under some interconnection principle maybe it gets litigated as stayed and then is appealed to NTIA.

This is not an approach that is going to get people interested in the program and get rural networks built.

MODERATOR: You wouldn't see these contracts between NTIA and a grantee as being an exclusive remedy, would you?

Or would you go independently to the FCC or state regulatory or something like that?

Anybody have thoughts about that?

No.

This is all for the lawyers.

Lawyers, put your hands up.

Okay.

MS. SOHN: We are not contract lawyers, though.

MR. SCOTT: I want to pause and examine the logic of the road we are going down because it is complex or difficult or challenging that doesn't mean we shouldn't do it. The law says to do it.

We are giving away 7 billion dollars.

We are not just going to hand it out.

There have to be clear rules and requirements for how the public gets a return on their investment.

And I think if we have learned anything from the stimulus bill thusfar is that people take the money.

They take the money.

With a few isolated exceptions people take the money.

I am not worried about in the

slightest.

What I am worried about is handing out all the money and waking up and realizing that we handed out a bunch of money and there wasn't anything built on top of that to ensure that consumers at the end of the day got what they needed.

MR. GUTTMAN-MCCABE: And I would argue let's not lose sight of the forest for the trees this is system. We're bringing broadband to where there has been a real focus on unserved areas.

These are areas right now that are not economically sustainable for broadband.

We see that word sustainable throughout the discussions of the last several panels so the notion is to try to build something that will endure and last.

And the idea is to bring it to areas that are not economically viable right now.

So we were talking about -- Kevin had mentioned, you know full employment for lawyers.

These are extraordinarily difficult issues and Gigi had mentioned things like prioritization.

If you look at Myspace we absolutely prioritize.

If you dial 911 on our network it's treated differently than if you dial a standard number.

We talk about the language specifically in the act that talks about healthcare and telemedicine.

I think people want us to prioritize telemedicine.

I'm not saying that Gigi was saying that shouldn't be the case but I am saying that it makes the issues somewhat more difficult than they seem at first blush and to do this literally over the next two to three to four weeks is going to be a staggering monumental challenge.

That's why you hear some of us in

the industries that probably step up to build some of this infrastructure and I'm sure we were not going to be the only ones but we are saying these are difficult issues.

I'm not sure anyone would have known what bit torn was two years ago but now it's at the center of how we look at discrimination Casey and others but we will be looking back saying what the heck.

We had no clue as to what network management meant at the time.

These are difficult issues that it's tough to decide on such a short timeframe.

MODERATOR: Gigi and then KC.

MS. SOHN: I have a couple of points.

First is when you talk about creation of jobs, first of all, nobody's ever made the connection between openness and somehow there would be no jobs created.

Again, as I mentioned before,

despite their claims of openness, networks are investing, AT&T is investing almost 18 billion dollars in 2009.

And we also have to think about it's not just creation of jobs for network providers but also creation of jobs from edge providers, the Googles, and Yahoos, and Skypes and Vonags who without an open network cannot survive and innovate.

That is critically important.

Let me touch on the prioritization point.

Prioritization is fine so long as it's in the hands of the consumer.

The question we have to ask ourselves and the question that Congress already answered in clear nondiscriminatory interconnection language is they don't want the network provider to have control over what gets prioritized.

That control should be in the consumer's hands.

If I want my 911 call to my telemedicine service prioritized, that should be my choice not the network providers' choice.

You mentioned Cox and I don't know if you were referring to it specifically but Cox is run algorithmically right now where they decide what traffic is time sensitive and what traffic isn't time sensitive and during times of congestion, they are going to slow down what they deem to be non-time sensitive, even if to you the consumer it's critically important.

So we don't want the network providers making those types of decisions.

We want you the consumer, the internet user to make those kinds of decisions.

MODERATOR: KC, did you want to comment.

Dr. Claffy: Okay.

This conversation is the best

argument for structural separation that I have heard thusfar.

I am not listening to these conversations all that often, but WOW.

Enforcement is tough.

That's why I have been opposed to the network or even operational so in fact -- some of the money should go to the building structure the networks that are not going I understand that's a more radical than it's probably going to be accomplished.

>> Can't hear you.

Dr. Claffy: But the other issue of enforcement we are talking about this system like it's a black box but with all due respect, you guys are the ones that are making it a black box.

Not just the providers themselves but the regulatories by not requiring reporting requirements or funding or anybody to fund research

into measuring the network and analyzing what is actually going on. So when I heard about the -- the Comcast issue, bit torn was discovered by a geek writing tools to figure out what is going on with my traffic.

So you can imagine that someone else could write these tools or these tools could exist as part of the package when you sign up for Comcast.

When they tell you transapparently these are the terms of connection you have a tool where you can verify, open source.

The enforcement seems to be navigable but the openness needs to be taken pretty seriously.

Not just of connection but of examination of the network.

MODERATOR: James?

MR. ASSEY: Let me step back.

MODERATOR: Can I interrupt before we start.

We are approaching the Q and A time from the audience if people from the audience would like to start assembling around the microphones in the auditorium.

MR. ASSEY: This stimulating and wide range discussion is perhaps the best example of why we really need to segment telecom policy broad telecom policy questions from the immediate task at hand with respect to stimulus.

And we do have a statute.

The statute specifically requires interconnection and nondiscrimination conditions.

But we are talking about much broader things.

And there will be an FCC that will continue to exist over the coming years, and that will wrestle with these questions in an incredibly innovative space.

When network operators are doing their best to provide consumers with

what they want more of, which is faster, better broadband.

And now we are layering on in the process of stimulus trying to do one better and expand it out to places where it's not economic to reach, and to provide more of a reason, better applications which will encourage consumers to adopt it. That is no small task and we are only making our task harder if we tack into uncharted waters that are going to muddy everything up.

MR. BANKS: I would like to add that nobody is talking about giving away these moneys without protections or openness.

The FCC has an openness statement. I think it has worked well over the last couple of years.

Consumers are adopting more and more things and the FCC policy statement should be what applies to these grants.

What we are talking about is

Layering extra things on to these grants.

And once again, these are going to go to people who are trying to build and operate networks in the most challenging and most difficult places in America.

There is no clear business case for doing this.

They may get the capital from this program but whether they can operate those networks in a way that keeps them in operation to serve very, very rural customers is doubtfully. If they have more obligations, that means a greater percentage of the money they get is going to pay for lawyers to litigate or developing complicated systems for network sharing.

This is not really what this is about.

It's about rural healthcare, about distance learning about getting people connected who don't have any

way to do that now.

MODERATOR: Kevin, probably the last comment and we will go to the audience.

MR. WERBACH: Just to come back to what I said before, even if the grants replicate the language of the FCC policy statement, we are still going to get into some of that. It's critical for NTIA we need to segment off the question of enforcement from the question of the substance and the substance is the debate we are having. It's unrealistic to think doing one thing or another on the substance will make the enforcement problem go away.

Secondly the program needs to anticipate how this program is going to go, and as Bob you appropriately highlighted there are two tracks, there is the BTOP program itself and what the FCC will do more broadly on these issues and again, the grant conditions don't have to be blind to

that. They can set up an enforcement mechanism like a process for the contractual language and anticipate the fact that there will be a later broader look at potentially other or different requirements across the whole industry.

MODERATOR: Thank you.

Let's go to the audience including the web and teleconference in the auditorium we have four microphones. We will go around in circular fashion around and around one by one and questions for the web and teleconference will come up here. I will ask each questioner to indicate whether you were give ago question or comment so if it's a question and whoever may be appropriate to answer it can focus on it.

I would like you to take no more than a minute.

We do have a clock up front.

Keep your eye on that. If you go way

over that, I will have to be rude. Part of my job is to be rude if I have to.

I hope I don't.

And if you could identify yourself by name and relevant affiliations.

So question number one from microphone number one.

>> Great.

Thank you, Bob.

And good morning to the panel.

My name is Paul Kenneff, Earthlink based out of Atlanta.

I have an a question and comment, hybrid, and I think our comment is more Earthlink policy than net neutrality debate and issues, et cetera we have seen over the past few years in part or at least in most as a direct consequence we have in broadband access markets.

Today most broadband subscribers can only subscribe to one ISP, that is an ISP affiliated directly with a broadband service provider.

I have a question for all the panelists that has been raised but particularly for James in the cable industry and Jonathan until the wireline industry, whether or not that would be one of those new and novel impediments that you alluded to in your presentations to mandate as a priority or requirement that the grantee offer a wholesale ISP access, either multiple or other ISP.

Today in both your respective industries most of your members do not offer it, but some of them do, as a commercial negotiated access or as a condition of a merger.

Thank you.

MODERATOR: Thank you and we are getting our timer.

You are getting an untimed question.

The only one.

MR. BANKS: I would start by saying, mandating once again, remember, this is going to rumor places, rural

healthcare networks, distance learning networks, small rural ISPs.

Trying to tell these people they need to develop these systems, the personnel, and the systems in terms of billing, in terms of allocating capacity, that they have to do this on the chance that someone later may want to sell wholesale ISP service over their distance learning network which may not be set up at all, seems to be forcing on them substantial operating costs, substantial unknown risks and substantial uncertainty that is all going to get layered into higher costs for them, or more money from the BTOP's program without any clear outcome there.

And what we really want is to get as many new broadband people on as possible.

And I think the program needs to focus on that.

MR. ASSEY: I would agree with John and only underscore by saying that layering on those types of conditions I think are only going to drive would-be applicants out of the pool of people that you actually want to extend service to in really hard to reach places.

So I don't think you need to address that fiber content in stimulus conditions.

MS. SOHN: But Congress looked at this issue, and at least in terms of the rural utility service it said that the Department of Agriculture had to give priority to those projects that give consumers choice, more than one service provider.

As I said in my original statement, I don't see any reason why NTIA should not do the same.

Give priority to those projects, those applications that allow for more than one service provider.

So clearly Congress has already

decided that they don't think it's a great burden that Jon and James thinks it is.

MODERATOR: Microphone number 2?

>> This is a question for the panel.

My name is Dennis Conte.

I am an independent communications consultant and my question is this, does the open internet connection requirement conflict in any way with one of the other required purposes of the act which is to divide what would seem to be Intranet or organizations such as healthcare providers and so on, that might be closed networks as opposed to open networks connecting to the broad internet?

MR. BANKS: We have all been talking about this but I am not smart enough to know who the best grant applicants will turn out to be it may be more or less closed networks for healthcare or learning.

Some of the best applicants may be back haul providers to provide transport from rural areas to the internet.

And to the extent that you have unusual but really good applications that provide value in rural areas for networks that don't match up with what we kind of talked about as the broad consumers broadband networks we have in urban areas, then all of these obligations, especially things like interconnection or very strong nondiscrimination proposals could handicap those applications and either mean that NTIA doesn't get to look at the applications or that they don't make economic sense.

I think if I were in NTIA's shoes, I would want to see those applications and be able to choose which provide the most value to people.

MODERATOR: Jon, you are not saying that one of those closed networks

would not be subject to the broadband principles?

MR. BANKS: Right.

I am saying that we have all sort of known the broadband principles but we don't know what are the most valued politics that are going to come in.

Some may conflict with an interconnection rule.

MODERATOR: Let me just follow up a thought.

Does the law or the statute give the NTIA flexibility in their contracts to distinguish between different -- some different provisions applying to different classes of grantees, perhaps with some minimum with broadband principles depending on how you interpret that.

But could different classifications of carriers or -- sorry, grantees have different contractual rules?

MR. BANKS: I think very briefly what the statute says is the

conditions shall apply to all grants.

And not past that, but just to the recipients of the grant.

MODERATOR: Kevin?

MR. WERBACH: I think within that, I don't think there is anything in the statute inconsistent with what NTIA is actually looking at what is going on and the discussion is very good is an example why thinking that the simplest possible grant requirements are not necessarily going to be the best ones because these circumstances are going to come up, and NTIA doesn't need to tie its hands to say ahead of time, here are the 15 kinds of grants and exactly what we are going to do in each case but in situations like this one with an appropriate way to address them when it comes up. I think there is a good question, there is the issue of whether being consistent to have a private

healthcare network.

The other question is in making those choices, if there is an option between having a private closed network that only serves certain health IT needs in a rural community versus a network from the same provider or otherwise that provides more broad applications and platforms for different kinds of services, I think it's appropriate to say that there is more value in not limiting the network.

On the other hand, it doesn't mean that healthcare records should be out on the public internet.

So I think NTIA to the extent that it can articulate and identify these kinds of differences, yes a broadband access network is different from a back haul network is different from a private distance learning network that it shouldn't ignore them as you put it into the general standards for the program

but I leave itself flexibility in deciding on selecting different grants how it applies the more general principles in the statute.

>> Good morning, my name is Jim Stevens.

I am from Anchorage, Alaska, and I have been on the leading edge on deploying networks in rural Alaska. The issues I have today -- I have issues with some of the statements of the panel, saying that rural areas are not sustainable.

They are non-sustainable because the folks don't have access to the same subsidies that the big teleCo.'s my main issue is that eventually rural America is the only viable way of getting broadband out to rural consumers is over satellite based internet connections.

I have not heard any discussion about interoperability, how that applies to satellite-based connections and how network

management occurs over satellite-based connections that allow open access to the internet. When you talk about Skype, Vonage, or any of those things, the satellite providers automatically cut off peer-to-peer connections, which means you cannot use Skype or any of these other useful tools for reducing costs in rural America. So that would be my first thing, to ask this panel to address.

MODERATOR: Let's leave that as the first.

What we can do if you got more questions is we will go around in the circle and you may have a second or third shot.

You had one point if I understand right.

Satellites interoperability.

MR. BANKS: Satellite people aren't here but from what I understand about satellites they have very restricted capacity.

And they dominion provide a service that reaches throughout the country, it's a little more expensive, I think in this program we are looking for more affordable broadband but again that raises the difficulty of these rules that makes sense for certain providers that can comply with them, may not make sense for rural WISP's, wireless providers and may be inapplicable to satellite providers which may be the only lifeline for some people.

MR. GUTTMAN-MCCABE: I am aware of some that provide but they are constrained in terms of capacity. And out of the gate they say no peer-to-peer, period.

It's not a service that we allow on our system.

Have you to measure whether that tradeoff makes sense but it's not unique just to satellite providers.

MODERATOR: Okay.

Let's go to microphone number 4.

>> Hello, my name is drew Clark, I am editor and executive Director of broadband census.com and we provide information and news about local broadband speeds, viability reliability and competition.

So I have a question and it concerns the issue of data.

And Kevin and KC both brought this issue into the discussion.

Obviously there will be another panel this afternoon dealing with more aspects of this.

I would like to ask about two parts.

One is the data about infrastructure, if you will, about the basics of speeds, prices, etc., and how data should be required so that carrier data is included in a broadband map.

But the second and more pertinent to being what is talked about here is the map of the flows as opposed to the infrastructure and how those kinds of flows can be captured.

Were you Kevin and KC and perhaps others suggesting that as part of a condition for receiving grants carriers ought to be required to disclose further information above and beyond where they are offering service, things like the restrictions or potential throttling of bandwidth and the like?

I would be interested in your reactions, anyone.

MR. WERBACH: Short answer is yes.

There is physical infrastructure in interpretation of equipment and there is practices in terms of network management.

It's not saying certain things would be exclude but there should be disclosure and awareness as a part of this program as well as disclosure about interconnection practices that will feed into that as well.

MS. SOHN: And I said that NTIA would actually have to pre-approve,

something I was thing about raising in the enforcement discussion, pre-approve those network management practices to ensure they were not discriminatory.

>> Microphone number 1.

>> Good morning, everyone my name is tina moring.

I am from a little company in North Carolina called computer central we are an internet provider and computer store.

What brings me here today is, we have three counties that are so rural that if you get in town, you are going to have a high speed option, you are going to have cable and telephone service provider, but the rural areas where you got your farmers farming, kids that are trying to learn from home or homework at home, or people that are able to work from home, do you feel like priorities should be given to wireless providers now, especially

since this is their season.

When it's getting warm you don't want wireless equipment in January, you want to do it now to get it all completed in 2010?

MODERATOR: That's a question for the criteria.

MR. GUTTMAN-MCCABE: Yes, absolutely yes.

Yeah, I mean obviously I represent the wireless industry and we to a large extent, when it comes to cost in many areas we can do it cheaper. I think taking off my CTIA hat a lot of those decisions are up to NTIA when they put whether it's one or two or three different applications for the same area together they should look at as I think you are going to hear over the next couple of days a bunch of different criteria.

But you raise a point I will take ten seconds to make a commercial pitch which is part of this effort

if wireless is part of it there is going to be a need to help us get the towers sited.

You talk about seasonal issues.

So I think that would be part of it.

Helping infrastructure get built, whether it's wireless or others helping to facilitate that process.

>> We need to get that "American idol" judge to see who is going to win.

MODERATOR: I don't mean to interrupt, but I am.

Microphone number 2.

>> Kelly Bowman speaking in my capacity as for the rural back haul providers.

From that perspective open internet production is thing, traffic is traffic and more traffic is better.

The question on the interconnection thing works into the last mile solution wherein wimax vendors will demonstrate that compliance to standards does not imply

interoperability and things like that.

Secondly on the context question that Bob asked earlier, a comment would be that my concern would be when the grantees go to pick their vendor providers every state in the union usually has an RFP or state contract requirement for the vendor on public funds.

My question is how will that be addressed under the ARRA?

Thank you.

MR. GUTTMAN-MCCABE: Any contract lawyers?

MODERATOR: I think that goes into the public record as an open question.

And NTIA will see that question and will consider it.

>> Marbaliss from the Virginia ISP association.

We fully support net neutrality to net ISP's as well as open access.

One of the things we are seeing and

I heard from the panel is it's not affordable for other carriers or ISP's to sell over the top of the network.

What we are finding out is one of the fastest ways you can find for adoption of broadband to areas under served is we have somebody bring WIMAX, there is people on the internet, less than 1% people have come on the internet in the last seven years because people are on dial-up access allowing the dial-up ISP's to run across those networks that are built we found the most cost effective and efficient.

Normally it would cost us 120 dollars to 4 hundred dollars to market.

It's more cost effective to allow people to run across the network and it's the quickest way we found for broadband in the region and for sustaining ISP's in the region.

Thank you.

MODERATOR: That was just a comment?

Thank you.

Microphone number 4, please.

>> Hi, I'm Harold hertz.

A comment.

I want to thank the panel for their nice comments.

I have been asked by grand escape communications -- great plains communications it is a rural telecommunications carrier in Nebraska.

I want to leave you with three words -- three thoughts, precision, clarity and predictability.

The recovery act provides at a minimum that the adherence to the FCC's existing broadband policy statement be a contractual condition for NTIA grants.

NTIA made the sign to place other provisions including nondiscriminatory provisions.

NTIA should select and publicize any such conditions as early as possible

in the process.

Great plains communications seeks to participate in this broadband program.

Great plains believes that nondiscrimination provisions and interconnection obligations are important, but so, too, are precision, clarity and predictability of what those decisions require participants.

Great plains will meet to comply with these conditions in this way, the great many Americans who have worked hard to pay the taxes for this broadband program could have some assurance.

MODERATOR: Microphone number 1?

>> Kris Espinoza with League of Latin American citizens.

A general comment.

I agree with I think consumers should decide what is the priority content is and how that is managed. That's an important discussion to

have.

I just feel like maybe this is not the best vehicle to do that.

We are going to have that discussion, F we are going to have that discussion it should be industry-wide and not specific to the stimulus funding in terms of contract language without flushing out new language it needs to happen, it feels like maybe this isn't the right vehicle to do that.

MS. SOHN: I want to reiterate a point that Ben and I both made I think it's absolutely the right place because we are talking about a tremendous government benefit and we are talking about explicit congressional language that shows a desire to have open and nondiscriminatory networks.

So I can't imagine a better time when the government is doling out 7.2 billion dollars to have this conversation.

And to require this kind of commitment from the network providers.

MODERATOR: Thank you.

Microphone number 2.

>> Dennis Conte independent telecommunications consultant.

I want to correct some statements that were made earlier about satellites.

In fact, the latest generation of satellites such as spaceway do in fact allow for high bandwidth peer-to-peer communication with their on board switching and spot use.

Thank you.

MS. SOHN: So we don't have to file a complaint against you at the FCC?
(Laughs)>> my name is Donnie Smith, Jaguar communications a rural provider in Minnesota.

I have basically a comment but there is a question rather hidden in it. We currently run an open network in

some of the more rural areas of southern Minnesota.

There are multiple providers on that network already and we do it without any subsidies.

And we maintain a profitable company.

That's the first portion of the comment.

As it comes into this, as we are looking at this with the rules for openness, sustainability, and interconnection, which of these types of requirements become the deciding factor on what type of grants would be given?

Thank you.

MODERATOR: Ben?

MR. SCOTT: Well, to your question, I think that's a question about criteria, and I think for the purposes of this panel, those applications that are committed to nondiscrimination and interconnection I think are most

directly in compliance with the law. But I want to take up something that you just pointed out, which is run a rural network that is open.

Well we heard earlier that is near on impossible and if we were to have those poor rural carriers saddled with nondiscrimination -- that's news because all the rural carriers have been asking for broadband to be puts back under title 2-the full panoply of regulations to go under the telecom act.

I think we ought to put a fish tank into the stage so we can see the red herrings in them as they come up.

MODERATOR: No, no, now, come on.

MR. BANKS: There are rural companies that do amazing thing to operate broadband networks in rural areas and I have nothing but admiration for people like you that do it.

This program is getting to the even more rural areas and again, that is

a huge challenge.

And layering extra obligations on people and especially since we don't know exactly what kind of applications are going to come out, whether they are public safety or healthcare, putting these obligations on those people is only going to raise their costs and make it that much harder to build out in these areas where nobody is today.

MR. WERBACH: Just a quick plug on that again for data.

We make these arguments just anecdotally on what model works and this program can give us a lot better data about what different networks are actually doing, what their network management practices are, what their business models are and what their open access policies are that could later on feed policy making so we shouldn't ignore that in developing the program to ensure that next time around we are not

doing this so much in the dark.

MODERATOR: We have a question from the internetor teleconference from Lowell.

He asks should NTIA prohibit certain types of equipment, such as deep pack and inspection that are counter to open internet principles and his follow-up is should NTIA think about requiring radio recipients to engage in interconnection by a model agreement created and published by NTIA, for example, the model could require that networks be monitored by a university or science program or include a no compensation agreement to prevent content discrimination.

Does anybody have any responses to Mr. Feldman's comments and questions?

MR. SCOTT: That's a very interesting question and it's something we author to look at in terms of how federal dollars are

being spent, whether they are being spent in actual infrastructure or being spent on network management tools.

I would hasten to add that not all network management tools are necessarily a problem.

In fact many network management tools are absolutely essential.

Have you to have some traffic management or it won't function.

However, I think we ought to use the tools that the law specifies that we need to have to make sure that it is the practice of a network operator rather than the infrastructure that they own that is nondiscriminatory.

MODERATOR: James?

MR. ASSEY: I think it would be a mistake to go down that road to essentially impose a technology mandate or prohibition in an area that is incredibly dynamic where there are new threats every day that the network operator has to deal

with, whether it's a virus or worm or something else that is going to actually detrimentally impact the consumer experience.

You know, it's funny, we talk about all these issues but we do the surveys and ask people what they really like, I mean broadband is off the charts.

They love their broadband experience.

And one of the reasons they love it is because it works, they are getting faster services and services next year are going to be faster than the services that are offered this year, and we need to restrain ourselves and allow the network operator the flexibility to manage the network in a way that is going to maximize the consumer experience that people get.

MODERATOR: KC?

Dr. Claffy: As I said earlier, you can't really effectively identify

traffic without PTI right now.

That's a problem because of all the privacy concerns but I think you also can't remove that technology from the network because of security concerns and I didn't get to talk about 2 million bot net, everybody's windows PC being taken over by unknown forces and using them for activities you probably wouldn't approve of.

But there is major security issues how the providers are dealing with security issues is another issue but one way around this fear everybody has of DPI is going back to transparency.

Including transparency of the money, where the money goes, so I would like a tag of the money to follow it through the system as it goes from company to company to figure out a little bit about how the economics of the system worked.

In fact, I would love it if the

southern Minnesota rural provider would write a paper on how he is so profitable at low cost without any subsidies because this is the kind of information that is not out there. Network economics is in a worse situation than network science and that's a high bar -- or a low bar as the case may be and the National Science Foundation is this year in the process of trying to write a network science agenda.

So it's an incredible opportunity to kind of solve two problems at once, but DPI's I reluctantly say because I am aware of the privacy issues and the privacy conversation is way behind the technical capability, let's put it that way.

And because I understand about what's under the hood I wouldn't give up the technical credibility either because the good guys need it, too.

MODERATOR: Microphone 4 gets the

Last word or last question.

>> Thank you.

My name is ali shanami I am from an engineering consulting firm from the great state of Florida we are an AA and small business, and I have one question and one comment.

Earlier there was a statement about enforcement and recommendation was maybe use FCC if there are issues in contracts between NTIA and grantees. FCC has recognized their resource problem in another proceeding which was called rebanding under do doctrine 0255.

They found they went to an independent third party and said you handle those issues and problems as they come to and flexibility to change.

So I would caution going to FCC for enforcement because of their resources.

The question I have here is about small businesses that have written

by Congress to be there with all the uncertainties and problems with the life of the grant and the operation and how you maintain it post-grant life.

How would small businesses like us be able to take the money and implement, operate, and maintain the system during and post-grant life?

MODERATOR: Any suggestions from the panel?

Life after the grant.

MR. GUTTMAN-MCCABE: I think that's the concern that many of us have been raising is the notion that this money can go towards building out a network or creating or extending a network, but then you have maintenance and operation concerns going forward and the idea is I think to preserve as much capital for the ongoing process and to make these as viable or sustainable as possible.

But again, I said earlier, forest

for the trees, these are some of the most difficult places to serve.

So, as referenced by that question, there is going to be concern about getting an entity to come in to build, but also to sustain and operate.

I think that's going to be a difficult question and it shouldn't receive short shrift because we want to have a policy debate that most of us -- I will take KC off the list but most of us get paid to engage in.

So that policy debate is sensible and it makes sense.

But you go back and look at the policy debate around the D-blocking in our space, just total, everyone had good thoughts and best interest in mind, and no one stepped up to bid on that public safety license because the requirements were too onerous.

That's an example from several

months ago where a multi billion dollar asset went unpaid for, no one participated because it was too onerous.

I think we have to look at it.

MODERATOR: Kevin, you get the last word.

MR. WERBACH: To get back to the commented.

I don't think D block is relevant to the question of life after the grant.

I think it's an important issue that the questioner raised but it's beyond the subject of this panel which goes to selection criteria and who NTIA selects.

But your first point about the FCC using private parties is worth highlighting.

You know, as I said, there are ways that things can go to arbitration, they can go to standards bodies, they can go to self regulatory organizations and NTIA as well as

RUS and FCC should look at the full panoply of those mechanisms during this process as opposed to assuming everything is going to be solved.

But what is problematic about the discussion we are having is we are assuming that there is necessarily a connection between the language of the contracts, how specifically it says on interconnection and nondiscrimination and everything that happens afterwards.

If done properly these could be de-coupled so the thing we agree on getting money out quickly, and stimulating the economy and getting jobs created is not inconsistent with promoting innovation in the networks.

MODERATOR: I misspoke.

Gigi gets the last word.

MS. SOHN: I don't share Chris's fear that nobody is going to apply for this money because of strong

openness requirements.

I was on the webcast in the first meeting there were people lining up at 2:00 in the morning to hear the guidelines.

There are people going to be beating down the doors for the money, they will comply with strong openness, and we will all be happy.

If the big guys don't want the money, fine, if they don't want to comply with the openness connection, fine.

There will be other people beating down the doors.

MODERATOR: It's nice to know we are all going to be happy.

That's an excellent thought to end on.

And I would like to presume, I presume the -- I presume the applause was for the entire panel.

We shall give a quick round for the entire panel.

(Applause (.

We will reconvene at 1 p.m. for a roundtable discussion on the role of the states.