## UNITED STATES OF AMERICA

FEDERAL COMMUNICATIONS COMMISSION

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CONSUMER ADVISORY COMMITTEE

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MEETING

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MONDAY FEBRUARY 26, 2018

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The Advisory Committee met in the Commissioners Meeting Room, 445 12th Street, S.W., Washington, D.C., at 9:00 a.m., Eduard Bartholme, Chairman, presiding.

COMMISSIONERS PRESENT: AJIT PAI, Chairman \*\* MIGNON CLYBURN, Commissioner

COMMITTEE MEMBERS PRESENT: ED BARTHOLME, Committee Chairman ZAINAB ALKEBSI, Deaf and Hard of Hearing Consumer Advocacy Network DEBRA R. BERLYN, National Consumers League ALAN BUTLER, Electronic Privacy Information Center SEAN CARROLL, Massachusetts Department of Telecommunications and Cable \* JOSLYN DAY, Massachusetts Department of Telecommunications and Cable \* FREDERICK ELLROD, National Association of Telecommunications Officers and Advisors AMINA FAZLULLAH, National Digital Inclusion Alliance

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B. LYNN FOLLANSBEE, USTelecom PAUL GOODMAN, Center for Media Justice/Media Action Grassroots Network (MAGNET) \* SUSAN GRANT, Consumer Federation of America MITSUKO R. HERRERA, National Association of Telecommunications Officers and Advisors \* KYLE J. HILDEBRAND, Subject-matter expert, Special Government Employee THADDEUS JOHNSON, National Association of State Utility Consumer Advocates JULIE KEARNEY, Consumer Technology Association LUISA LANCETTI, T-Mobile ROSS J. LIEBERMAN, American Cable Association MAUREEN MAHONEY, Consumers Union \* SARAH MALAIER, American Foundation for the Blind KATIE MCAULIFFE, Americans for Tax Reform KEVIN MCELDOWNEY, Consumer Action \* STEVEN MORRIS, NCTA - The Internet and Television Association FRANCELLA OCHILLO, National Hispanic Media Coalition ALEX PHILLIPS, Wireless Internet Service Providers Association STEVE POCIASK, American Consumer Institute KEVIN RUPY, USTelecom JONATHAN SCHWANTES, Consumers Union \* ANGELA SIEFER, National Digital Inclusion Alliance KEVIN TAGLANG, Benton Foundation \* BARRY UMANSKY, Digital Policy Institute LARRY WALKE, National Association of Broadcasters \* OLIVIA WEIN, National Consumer Law Center KRISTA WITANOWSKI, CTIA

COMMISSION STAFF: SCOTT MARSHALL, Designated Federal Official CHRIS ANDERSON EVAN BARANOFF MICAH CALDWELL GREGORY COOKE DAVID FURTH ROGER GOLDBLATT KURT SCHROEDER KAREN PELTZ STRAUSS MARK STONE PATRICK WEBRE

\*Present by teleconference \*\* Present by video

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1	P-R-O-C-E-E-D-I-N-G-S
2	(09:08 a.m.)
3	CHAIR BARTHOLME: Good morning
4	everyone. Start by just saying thank you to
5	everyone for taking time out of your busy
6	schedules to be here, to join us by phone, I know
7	we have a number of people on the phone today.
8	We've put together what will hopefully
9	be an insightful and pretty full agenda, to make
10	good use of your time. So, for those of who
11	don't know, I'm Ed Bartholme. I'm with Call for
12	Action.
13	I'm going to turn it over to Scott
14	Marshall. Scott's with the FCC, he's our
15	designated Federal Officer, and he'll go over
16	some logistics for us.
17	MR. MARSHALL: Hi, good morning
18	everybody. Again, welcome. We will be looking
19	forward to hearing from Commissioner Clyburn,
20	this morning, sometime between 9:15 and 9:30.
21	And we also have remarks from the
22	Chairman who, unfortunately, is not at another

commitment out of town, as I understand it. 1 And 2 couldn't join us today in person, but did record remarks late last week. So we'll be hearing 3 4 those too, before the CGB update at 9:30. We'll 5 provide more info on the breakout groups as we get closer to them this afternoon. You have in 6 7 your packet, a list of those room locations. 8 And we'd really appreciate the working 9 group leaders to set up the conference bridge, so that people that aren't here, in person, can dial 10 in on the phone. But, other than that, I think 11 12 that's about it. Shall we do introductions? 13 CHAIR BARTHOLME: Yes. 14 MR. MARSHALL: Good. Great. Going 15 from next to my right, I guess. MEMBER MALAIER: 16 I'm Sarah Malaier, 17 American Foundation for the Blind. 18 MEMBER GRANT: Susan Grant, Consumer 19 Federation of America. 20 MEMBER BERLYN: Debbie Berlyn, 21 representing the National Consumers League. MEMBER SIEFER: Good morning. 22 Angela

1 Siefer, National Digital Inclusion Alliance. 2 MEMBER WEIN: Olivia Wein, National Consumer Law Center. 3 MEMBER JOHNSON: Thaddeus Johnson with 4 5 NASUCA. MEMBER HILDEBRAND: Kyle Hildebrand, 6 7 Individual. 8 MEMBER PHILLIPS: Hi, I'm Alex 9 Phillips. I'm here with the Wireless Internet Service Providers Association. 10 11 Hello, I'm Julie MEMBER KEARNEY: Kearney with the Consumer Technology Association. 12 MEMBER LANCETTI: Hi. Luisa Lancetti 13 14 representing T-Mobile. 15 MEMBER WITANOWSKI: Krista Witanowski, 16 CTIA. 17 MEMBER FOLLANSBEE: Lynn Follansbee, 18 US Telecom. MEMBER LIEBERMAN: Ross Lieberman, 19 American Cable Association. 20 21 MEMBER POCIASK: Steve Pociask. I'm with the American Consumer Institute. 22

MEMBER UMANSKY: I'm Barry Umansky
with the Digital Policy Institute.
CHAIR BARTHOLME: And again, it's Ed
Bartholme with Call for Action. Who do we have
on the phone this morning?
MEMBER OCHILLO: Good morning. This
is Francella Ochillo, National Hispanic Media
Coalition.
MEMBER DAY: Joslyn Day, Massachusetts
Department of Telecommunications and Cable.
(Simultaneous speaking)
MEMBER TAGLANG: Kevin Taglang, Benton
Foundation.
MEMBER GOODMAN: Paul Goodman, Center
for Media Justice.
MEMBER HERRERA: Mitsuko Herrera,
National Association of Telecommunications
Officers and Advisors in Montgomery County,
Maryland.
CHAIR BARTHOLME: Did somebody just
join? Or is there anyone else on the call?
MEMBER WALKE: Larry Walke from NAB.

1	Did you hear me?
2	CHAIR BARTHOLME: Yes. Got you Larry,
3	thank you.
4	MEMBER WALKE: Thank you.
5	CHAIR BARTHOLME: Anyone else?
6	MEMBER WALKE: Sorry I can't be there
7	in person today.
8	CHAIR BARTHOLME: We miss having you.
9	So, that's a good segue to brag about the
10	wonderful food that is here, in the room, for
11	those of you on the phone and aren't joining us
12	in person. And I'd like to take a second to
13	thank NCTA for providing food. I think that
14	Stephanie and
15	MR. MARSHALL: Steve just walked in.
16	CHAIR BARTHOLME: Well, Steve just
17	walked in. So, just in time. Just in time to
18	give thanks for food.
19	MR. MARSHALL: There you go. What
20	timing.
21	(Laughter)
22	CHAIR BARTHOLME: For those of you in

1	the room here, the internet access code is
2	FCC823302. And
3	MR. MARSHALL: That's capital FCC.
4	CHAIR BARTHOLME: FCC is capitalized.
5	There's food back in the corner. There's also
6	water back there, if you need to get some of that
7	as well. I think we're ready to roll.
8	MR. MARSHALL: Okay.
9	CHAIR BARTHOLME: All right. So the
10	first thing up this morning we are excited to
11	have pre-recorded remarks from the Chairman. As
12	Scott mentioned, he's traveling today and wasn't
13	able to join us in person. But he did prepare
14	some remarks, and recorded those for us. So,
15	we'll start there.
16	CHAIRMAN PAI: Good morning. I wish
17	I could join you in person today, but I have a
18	prior commitment out of town, so I'd like to
19	share some brief remarks with you via video.
20	Welcome to the Winter of 2018 meeting
21	of the FCC's Consumer Advisory Committee. And
22	thank you so much for sharing your time, and

expertise with us. We greatly appreciate it. 1 2 I also want to acknowledge the CAC's leadership team, namely the Chairman, Ed 3 Bartholme, and the chairs of the CAC's working 4 5 groups. The CAC reflects a core tenet of my 6 7 policymaking approach. That the decisions we 8 make inside this building need to reflect input 9 and fresh ideas, from outside these walls. Our staff's expertise is truly world class. 10 11 But the FCC doesn't have a monopoly on 12 good ideas. Far from it. The CAC offers a 13 unique opportunity for consumers, and industry, 14 to exchange ideas with the goal of developing solutions that work. This, your work, helps us 15 16 get it right. And that's one reason I'm very 17 pleased that you're partnering with us on 18 tackling robocalls. As you know it's our top 19 category of complaints, here at the FCC. And 20 it's accordingly our top consumer protection priority. 21 22 Your input is very helpful as we

consider what to do about robocalls. I'm looking 1 2 forward to receiving your recommendation this afternoon, regarding call authentication as a key 3 4 step in addressing the robocalls problem. 5 We're also eager to get your advice on how to measure the effectiveness of our efforts 6 7 to combat robocalls. 8 The complaint process is another area 9 in which we've been glad to hear from the CAC, and we've implemented many of your recent 10 recommendations. 11 12 For example, we've added a dedicated 13 button on our Consumer Complaint Center landing 14 page, to make it easier to file an unwanted calls 15 complaint. 16 And we've also put together valuable 17 educational materials that we can send in a 18 single email, when responding to a consumer's 19 complaint. Another high FCC priority is public 20 21 safety. I'm very glad that you chose to make 22 public safety the theme for your meeting today.

1	You'll be hearing from key staff, at
2	the FCC's Public Safety and Homeland Security
3	Bureau, on topics such as disaster response,
4	improvements in alerting including geographic
5	targeting of alerts, and next generation 911
6	service.
7	Last week I announced that I, along
8	with members of my Hurricane Recovery Task Force,
9	will travel in March to Puerto Rico and the U.S.
10	Virgin Islands. We'll take another firsthand
11	look at the recovery process.
12	We want to evaluate lessons learned
13	from Hurricane Maria, and to prepare for the
14	upcoming 2018 hurricane season.
15	The FCC has taken numerous actions in
16	the aftermath of last year's hurricanes,
17	including advanced USF funding, E-rate support,
18	temporary waiver of Lifeline certification rules,
19	experimental licensing of Internet access
20	delivered via balloons, and much more. The FCC
21	remains committed to supporting recovery efforts
22	and helping to restore, and in some cases

1	rebuild, communications networks as quickly as
2	possible. The FCC's efforts here reflect
3	consumer protection in its most urgent form. In
4	closing, let me thank you, once again, for
5	helping to make the FCC's policies better.
6	Our challenges aren't easy, but
7	working together there's a lot we can do. I hope
8	to join you, in person, at a future CAC meeting.
9	And in the meantime, my best wishes for a
10	productive meeting today. Thanks.
11	CHAIR BARTHOLME: So, thank you
12	Chairman Pai for recording those and sending
13	those along for us. Next up on the Agenda, we're
14	very excited to be joined, in person, by
15	Commissioner Clyburn.
16	COMMISSIONER CLYBURN: Where's the
17	encore?
18	CHAIR BARTHOLME: She's obviously no
19	stranger to the room, so.
20	COMMISSIONER CLYBURN: I just didn't
21	I skipped breakfast, so I just didn't want to
22	be tempted by grabbing these.

1	MR. MARSHALL: Help yourself.
2	COMMISSIONER CLYBURN: Again, good
3	morning everyone. Thank you, Eduard. I want to
4	start off by not only thanking each of you for
5	your service, but, as the Chairman said, for
6	highlighting public safety in today's agenda.
7	My approach, when it comes to public
8	safety issues, has been shaped by three key
9	guiding principles. People with disabilities and
10	access challenges must benefit.
11	We should do all we can to educate
12	each and every consumer about these public safety
13	benefits. And collaboration among all
14	stakeholders work better than litigation. Sorry
15	lawyers in the room.
16	The first two principles, you may
17	note, are at the core of this Committee's
18	mission. Since September of 2017, the FCC has
19	addressed several public safety issues, in a
20	largely bipartisan fashion.
21	It has adopted rules to implement two
22	important congressional objectives, or

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directives.

2	The first was to facilitate the
3	nationwide dissemination of information when a
4	law enforcement officer is seriously injured,
5	killed or missing in the line of duty. Through
6	the adoption of the three character Code BLU,
7	B.L.U., as a new EAS event code to enable the
8	delivery of BLU alerts over emergency alert
9	system, and wireless emergency alerts, or WEAS.
10	And last month the Commission took
11	another step to improve the WEAS system by
12	allowing, through the previous administrations
13	enhanced geotargeting proposal, we established a
14	deadline that requires the industry to meet that
15	enhance standard by November 30, 2019. Three
16	hurricanes, I don't have to remind you,
17	devastated communities in Texas, Florida and the
18	U.S. Virgin Islands, in Puerto Rico.
19	And again, I must commend this staff
20	of the Public Safety and Homeland Security
21	Bureau, here at the FCC, for their rapid
22	response.

1	They jumped into action by dispatching
2	personnel and resources, to ensure state and
3	local governments had the help that the FCC could
4	offer them to protect their citizens, and restore
5	vital communication services.
6	But the wireless service outages, we
7	witnessed during those disasters, indicate that
8	the Commission, all of us, may have to do more.
9	According to our network outage reports, five
10	days after Hurricane Maria's landfall on
11	September 16, 2017, 95.2 percent of those cell
12	sites remained out of service.
13	All counties in Puerto Rico had a
14	greater than 75 percent cell site outage. And
15	48, of the 78 counties Puerto Rico, had 100
16	percent of their cell sites out of service.
17	Those levels were worse than any prior
18	hurricane outage reports, including Katrina and
19	Superstorm Sandy
20	Since Hurricane Katrina struck in
21	2007, the Commission has been studying ways to
22	improve the resiliency of commercial wireless

networks.

1

2	In 2016, we opted to monitor a
3	voluntary CTIA-led initiative, which sought to
4	improve coordination among wireless carriers,
5	state and local governments,
6	and consumers in preparation for
7	outages that result from natural disasters. I
8	believe that the time is now for the Agency to
9	revisit this. And a great place to start would
10	be for the CAC working with the Agency's
11	Hurricane Task Force, on lessons on developing
12	and learning from lessons, from the outages we
13	saw during those three Hurricanes, Maria, Irma
14	and Harvey.
15	Related to the Commission's work on
16	public safety, I would like to highlight a
17	Commission initiative, focused on bridging the
18	broadband health divide. You may aware of our
19	Connect2Health Task Force, which launched in 2014
20	at my urging.
21	And thanks to Chairman Pai, has
22	continued to focus on examining the intersection

1	of broadband, advanced technology in health.
2	Last December the Commission
3	introduced into a memorandum of understanding,
4	with the National Cancer Institute, that will
5	focus on how increasing broadband access,
6	and adoption in rural areas, can
7	improve outcomes of rural cancer patients. As an
8	inaugural project, the Agencies have been deemed
9	a public private collaboration to help bridge the
10	broadband health connectivity gap in the
11	Appalachia,
12	taking another concrete step towards
13	closing the digital and opportunities divide.
14	So, again I would like to thank you for allowing
15	me to share a few words with you this morning.
16	And if time permits, even though I
17	know there's only a 15 minute window, I will look
18	forward to answer any questions or, better yet,
19	listening to any concerns you would like me to
20	take back upstairs. Thank you very much.
21	CHAIR BARTHOLME: Questions?
22	COMMISSIONER CLYBURN: Okay, well.

1 Thank you very much. 2 CHAIR BARTHOLME: Commissioner. 3 COMMISSIONER CLYBURN: But seriously, 4 do you have any concerns, especially that -- oh, 5 I'm sorry Angela. MEMBER SIEFER: There's been a tension 6 7 lately about the national broadband map coming 8 out, and the accuracy of the data and what we're 9 going to do about that. Can you talk a little bit about the map? 10 11 COMMISSIONER CLYBURN: Oh, one of the 12 things that we have been doing, and active in, is making sure that there is a robust challenge 13 14 process. 15 So if an entity, anybody, knows of 16 inaccuracies that would not be a high hurdle for 17 them to reach. And I think being open to those 18 checks and balances, and knowing that we have a 19 worthwhile, but -- I hate to say it, but a 20 working -- some inaccuracies that are in the 21 systems. 22 We recognize that we know we can't do

1	it alone. And so I think that it is one of the
2	critical steps, I believe, to move toward
3	accuracy.
4	CHAIR BARTHOLME: Does anyone on the
5	phone have a question?
6	COMMISSIONER CLYBURN: So again, we
7	continue to look we look forward to continuing
8	to work with you. If we could do it alone, it
9	would not be great. So that's why you're here.
10	You have taken so much time away from
11	your day-to-day schedule to inform, and serve.
12	And we, all of us, are the beneficiaries. And I
13	want to thank you, on behalf of my colleagues,
14	for doing that.
15	Because again, you know, without you
16	we would be very narrow in our focus. We would
17	not come up with the best and most robust ideas.
18	Coming from industry, coming from a consumer
19	groups, coming from all of you. And again, I
20	cannot thank you enough for your service. Have a
21	great meeting.
22	CHAIR BARTHOLME: Thank you.

1	MR. MARSHALL: Thank you.
2	CHAIR BARTHOLME: So next up on the
3	agenda, we're very pleased to be joined by a
4	number of Members of CGB staff, for an update. I
5	believe we're going to start with Patrick. Many
6	of you know Patrick Webre. Patrick is in charge
7	of CGB right now, and joined us at our last
8	meeting, so.
9	MR. WEBRE: Good morning everyone.
10	Thank you, Ed. Excuse me. I want to join
11	Chairman Pai, who I know you saw a video from,
12	and Commissioner Clyburn, in welcoming you to
13	this month's Consumer Advisory Committee Meeting.
14	Chairman Pai wanted me to pass along
15	his regrets for not being able to attend in
16	person.
17	But he is, well as a number of other
18	folks in the telecommunications field, are
19	crossed upon as they say, in Barcelona this week.
20	So thank you for your service. We say that a
21	lot, but it's meant heartfeltly. I mean this is
22	a, you know, a challenge. And it can be somewhat

1 inconvenient for you all to come in and sit here 2 for a day, and listen to the things that we do, and to engage us in conversation. 3 Sometimes 4 these are difficult topics. 5 We really appreciate your dedication, your service to the public, you know, for all you 6 7 do here. So, thank you again from me, and from my staff as well. 8 9 So Chairman Pai has already touched on 10 many of the topics, on your agenda today. Your 11 meeting theme, which is public safety, is particularly timely. 12 13 In light of the hurricanes that we all 14 heard about, and some of us suffered personally 15 from, last fall, and the recent 50th anniversary of 911 service. 16 17 In addition, the President recently 18 signed Kari's Law into effect, which will 19 facilitate the dialing of 911 services, without 20 the need to dial access numbers in advance, in 21 places like hotels. And as we all know, such facilities 22

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require dialing of nine, or other digits, before 1 2 you can get an outside line, and that can slow down the process for dialing 911. So, you know, 3 4 kudos for that taking place. And I know the 5 Robocalls Working Group has worked very hard on the call authentication recommendations, that you 6 7 will be considering this afternoon. And my thanks to Ed, and also Kevin 8 9 for spearheading this effort. And thanks to all of you again for working on it. 10 11 Next I'll have -- I'll ask members of 12 my Senior Leadership Team to give you updates on what we've been doing, in the Consumer And 13 Governmental Affairs Bureau. 14 One recent addition to our Bureau, who 15 16 many of you may know, she came aboard last 17 November, is Barbara Esbin. Barbara is back at 18 the Commission. 19 She is going to be overseeing -- she is overseeing our Office of Native Affairs and 20 21 Policy, and our Intergovernmental Advisory --22 Office of Intergovernmental Affairs.

1	Barbara is traveling with our
2	relatively new Chief of ONAP, the Office of
3	Native Affairs and Policy, this week. They're
4	visiting Navajo Nation, so she couldn't be with
5	us today. But I'm sure she's looking forward to
6	joining us in future meetings. So with that I
7	will turn it over to Mark Stone, who will address
8	some of the policy issues we've been working on.
9	MR. STONE: Thank you Patrick.
10	MR. WEBRE: Thank you.
11	MR. STONE: Good morning.
12	CHAIR BARTHOLME: Good morning.
13	Mark's another familiar face.
14	MR. STONE: Make sure my card is
15	facing outward. Good morning. Good to see all
16	of you again. I know it's been a while since we
17	met last, so.
18	I've been working a lot on robocalls,
19	and I bet a lot of you have been working on
20	robocalls as well. So I wanted to give you a
21	quick update on what we've been doing since you
22	last met.

1	The big headline, for us, was a
2	November item that Commission issued, relating to
3	call blocking, the blocking of presumptively
4	illegal robocalls.
5	That item built on a number of CAC
6	recommendations, so thank you for your hard work,
7	in the past and in the future, on robocalls.
8	First of all, the item acknowledged, really for
9	the first time, that voice service providers are
10	our partners in blocking illegal robocalls.
11	The Commission authorized voice
12	service providers to block certain categories of
13	calls, that are presumptively illegal, and that
14	was based on probably spoofed caller ID.
15	So, what the Commission said was
16	there's three categories of calls that voice
17	providers can block, before they ever reach a
18	consumers phone.
19	And those are calls that one, have
20	caller ID that purports to be from a number that
21	we know from the owners the number's owner
22	they do not make outgoing calls.

1	So, this is like the IRS scam, where
2	we know the IRS has said we do not make any
3	outbound calls from this number. If a call
4	purports to be from that number, you should block
5	it.
6	The second category of calls are those
7	that purport to be from numbers that are invalid.
8	So think of 000 number all the way through the
9	number.
10	And then the third category are calls
11	that purport to be from numbers that have not
12	been allocated to a carrier, or have not been
13	assigned to a consumer.
14	So, the Commission found that calls
15	that purport to be from these types of numbers,
16	highly likely to be illegal, can't think of a
17	good reason why a legitimate call would have that
18	type of caller ID.
19	And so voice providers are encouraged,
20	although not required, to block these types of
21	calls. And in a companion FNPRM, the Commission
22	acknowledged its history of trying to ensure that

calls are completed. 1 2 That's the general policy of the Commission for a long, long time. 3 So, what the Commission acknowledged 4 5 here, was a need or desire to sort of mitigate the chance that good calls would actually get 6 7 caught up in the call blocking net. So, it asked 8 some questions around that. 9 First of all, it encouraged any voice provider that's doing blocking to make sure they 10 11 have a mechanism in place to avoid false 12 positives. And secondly it asked whether it 13 14 should, in the future, require a call block 15 challenge mechanism whereby callers that make 16 legitimate robocalls that feel like they're 17 inadvertently having their calls blocked would be 18 able to identify that situation quickly, 19 get in touch with the voice service 20 provider, say hey you're wrongly blocking our 21 calls, can you fix it? 22 The Commission also asked a number of

other questions, in the FNPRM, including how it 1 2 could go about best evaluating the effectiveness of our efforts in trying to ensure consumers stop 3 4 getting illegal robocalls. For example, whether a provider should 5 report the number of calls they block, whether 6 7 they should report the number of false positives 8 and the like. 9 And then finally, the Commission directed CGB, in consultation with the Federal 10 Trade Commission, to issue a report in a year. 11 12 Roughly January of next year on how 13 well industry, Government and consumers are doing 14 in blocking illegal robocalls, as well as the remaining challenges to continuing those 15 16 important efforts. 17 So that'll be a big part of our work 18 in the upcoming year, and I'm sure we'll be 19 looking to you all for your help. So a lot of this work does track the 20 21 recommendations you all specifically recommended that the FCC authorize voice providers to block 22

1 specific categories of calls.

2	And that we be careful about trying to
3	avoid blocking good calls. So I want to thank
4	you for your hard work on that. And I know you
5	all are thinking about another big portion of our
6	work here, which is caller ID authentication.
7	So we look forward to your work in
8	that area as well. Thanks.
9	CHAIR BARTHOLME: And keeping with the
10	familiar faces theme, we have Karen Peltz Strauss
11	joining us now.
12	MS. PELTZ STRAUSS: Thank you. There
13	are a lot of cards up here.
14	CHAIR BARTHOLME: Now you're official.
15	MS. PELTZ STRAUSS: That's right, now
16	I'm official. I have my name in front of me.
17	Hi, it's great to see all of you again. So, yes
18	it's been a few months so we have a lot of
19	update. I'll go as quickly as I can.
20	Probably the most significant thing
21	that we did since the last time you met, was
22	adopt the Commission adopted an order on

hearing and compatibility, on both wireline and
 wireless.

3 It did a number of things, including 4 adopted a revised volume control standard for 5 wireline handsets, to provide a more accurate 6 measurement of voice amplification.

7 It also implemented a provision of the 8 CVAA, that's the 21st Century Communications and 9 Video Accessibility Act, to require that wireline phones, used with advanced communication 10 services, have hearing aid compatibility, 11 12 including compatibility with VOIP phones, voice 13 over internet phone services. It also requires, 14 and this is probably the most significant portion of the item, that all wireless handsets, newly 15 16 certified as hearing aid compatible, include volume control suitable for consumers with 17 18 hearing loss, within three years.

19 Many of you know that your phones 20 already -- your wireless phones already have some 21 amplification, but it's minimal. It's actually 22 going to require compliance with a particular

standard that's designed to meet the needs of 1 2 people with hearing loss. And of course we'll end up probably 3 meeting many of our needs, and everybody else's 4 5 needs, when for example you're in an outdoor area, in public place and you just can't hear on 6 your cell phone. 7 8 You'll be able to give it that extra 9 bump in the amplification. In the video programming area, we had some rules that were --10 11 had been adopted in the past, go into effect this 12 last December. Specifically rules rising our 13 14 complaint procedures, and creating a compliance ladder for closed captioning quality complaints. 15 16 We adopted rules on closed captioning And in order to -- if there's a 17 in 2014. 18 complaint filed there are several steps that one 19 must go through --20 that we must go through before we 21 actually bring enforcement action, to give the 22 industry an opportunity to remedy the problem.

1	On video gaming, on December 26th, we
2	granted a final extension of a waiver for a
3	particular class of video gaming software that
4	can access advanced communication services, such
5	as internet voice and text communications. That
6	class does not have to comply with our advance
7	communication services rules, for one additional
8	year.
9	This was a series of waivers that were
10	granted over the last several years. And this,
11	we made clear, that this will be the final waiver
12	for this particular class.
13	On video description, in January the
14	Media Bureau released a public notice announcing
15	the top 10 non-broadcast networks, according to
16	Nielsen ratings.
17	The reason that this is important is
18	because of that top 10, the top five have to
19	provide video description. That we look at the
20	top five every three years.
21	The top 10 are Fox News, ESPN, USA,
22	MSNBC, HGTV, TBS, Discovery, History, Hallmark

and TNT. You may wonder why we're choosing a top 1 2 10. Well that's because only the top five 3 4 will be chosen depending on whether or not they 5 have at least 50 hours of programing that's not live, or near live or is otherwise exempt. 6 So 7 this actually allows networks -- non-broadcast 8 networks to come forward and say, we want an 9 exemption because we don't fit into the category of networks that should be covered. 10 Also, beginning this July, just so 11 12 that you know, there's approximately a 75 percent increase in the amount the video description that 13 14 will be required to 87.5 hours per quarter. In emergency communications, since I 15 16 know that that's the theme of this particular 17 meeting, I do believe that you're going hear from 18 the Public Safety Bureau. But just so that you know the -- as 19 20 you -- or you may already know that they released 21 a public notice, seeking comment on the 22 effectiveness of emergency communications during

1 the 2017 hurricane season.

2	And, among other things, comments were
3	sought on the experiences of people with
4	disabilities, and how emergency communication can
5	be improved for these individuals. And the
6	commentary had already closed on that.
7	In addition, on January 18th, the
8	Public Safety Bureau and DRO, the Disability
9	Rights Office, co-hosted a round table about
10	emergency alert the emergency alert system, to
11	gather input about the accessibility of emergency
12	alerts, with representatives from consumer
13	organizations.
14	On January 31, 2018, the Commission
15	released an item that will improve wireless
16	emergency alerts by increasing the geographic
17	accuracy of these alerts.
18	And the order also requires that WEA
19	capable mobile devices preserve the alerts for 24
20	hours, so consumers have more time to review the
21	emergency information.
22	And that during this 24 hour period,

1 the messages displayed must continue to be 2 accessible to people with disabilities. On January 30, 2018, a preliminary 3 report was released, and I'm sure you're familiar 4 with this, by the Public Safety Bureau, 5 again, regarding the Hawaii Emergency 6 7 Management Agency's January 13, 2018 false 8 ballistic missile alert. We have also received 9 comments, and they are in the docket, that were very insightful from consumers with disabilities. 10 11 There actually was meeting being held 12 there by the National Association of the Deaf. 13 And so their perceptions, and their perspective 14 on what went on was very helpful, and has been filed in our record. Also, text-to-911 is 15 16 becoming increasing available in the U.S. 17 And, you may be aware since we live in 18 this area, it was recently announced that the 19 State of Maryland is going to be one of the next 20 State's to adopt text-to-911. We also have rules on real-time 21 22 texting, though I've talked to you about this in

the past.

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2	These real-time texts allows people to
3	send texts, and have the text received exactly as
4	it's being sent, without the need to press send,
5	or an enter key, which has proven to be very
6	helpful in emergency situations.
7	And I'm so happy to announce that, as
8	of January 1st, several nationwide carriers have
9	actually started implementing real-time text.
10	You can get it on some of your phones. It's
11	pretty cool, I suggest you try it out.
12	We're very, very excited and thank
13	those companies for meeting the deadline, and
14	taking the step to make this available. And
15	we're hoping that this is also useful for the
16	piece apps that do move to a text-to-911. In
17	that regard, we did issue, in November, a
18	clarification of how text-to-911 or actually
19	real-time text needs to be used, when emergency
20	services internet protocol networks are used.
21	In that situation the carrier is not
22	responsible to transcode the call from real-time

text to tty. This is a technical matter, but 1 2 it's important to those who deal with 911, and text-to-911 and real-time text. 3 Upcoming we are going to be doing our 4 5 Chairman's AAA again. These are awards for accessibility -- awards for advancement and 6 7 accessibility and they recognize the efforts of 8 individuals, organizations, academic institutions 9 and companies and agencies, to make communications products, and services more 10 accessible to people with disabilities. 11 The nomination period actually closes in two days. 12 There's still time to get your 13 14 nomination in, and we encourage you strongly to do so. We know that entities that have been 15 16 recognized in the past, are very happy to have 17 this plaque on their wall, so to speak. 18 It gives a good -- it's a good way to outreach your product or service, when it's 19 20 providing such accessibility. 21 And the nominated products, or

services or practices must be introduced to the

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1	public between January 1, 2017 and December 31,
2	2017. And the winners will be announced, again,
3	at the M-Enabling Conference this June.
4	All nominations should be sent to
5	chairmansaaa@fcc.gov. And if you search for
6	Chairman's AAA you'll find all the information
7	about the nominations. Finally, actually next to
8	finally, relay services.
9	There are some relay services now,
10	video relay services, that are able to provide
11	these services from their home. We have a trial
12	going on, so I just wanted to let you know that
13	that became effective in October.
14	In December we released a public
15	notice announcing that our user registration
16	database, to accept registration for VRS users
17	opened up.
18	This is a database that was required
19	by a 2013 set of rules, that the Commission
20	adopted. And individuals must submit their
21	information, some basic information, so that we
22	can verify their identities. That is actually

the requirements for that have gone into effect, 1 2 and there is a 60 day period in which we're accepting that information. 3 We've also been accepting requests for 4 a renewal of State certifications, of relay 5 services. 6 The way relay services are done is 7 8 they're kind of bifurcated. And there is a State 9 component, and there are 50 States plus several territories, that have their own relay programs. 10 They have to renew their certification 11 12 every five years. This is the year that we do this. 13 So we've been doing this. And finally, I 14 promise this is really finally, on Wednesday we have our Disability Advisory Committee meeting. 15 And we know we have a little bit of 16 17 overlap. We always welcome those of you who are 18 interested in attending, or watching online. 19 The Disability Advisory Committee will 20 also be holding a round table, in April, to talk 21 about good technical solutions for making real-22 time text accessible to braille devices, or

1 compatible with braille devices, and other 2 assistive technologies. And that wraps it up for the disability update. Thank you. 3 4 CHAIR BARTHOLME: Thank you Karen. 5 And we'll make sure that we get the dates for 6 that out, as well as the email address for the 7 Chairman's org as part of the follow-up. Next, 8 we're happy to be joined by Roger Goldblatt. 9 Roger is also a familiar face here in the room, and he's going to update us on outreach and 10 11 education activities. 12 MR. GOLDBLATT: Do you need these 13 people? 14 CHAIR BARTHOLME: Choose who you want. It's identity theft, but we'll look --15 16 (Simultaneous speaking) 17 MR. GOLDBLATT: You see the real Roger 18 spilt coffee on his white shirt, so he has to 19 keep tie right here. 20 MALE PARTICIPANT: So it'd be grounds 21 for dismal, you spilled coffee on there. 22 MR. GOLDBLATT: As you all know, what

we do at Outreach and Consumer Education is a 1 2 little be different than people that you've heard. But we have a lot of things going on, 3 4 that I actually call most of you, on a regular 5 basis, to get ideas of how we can get the word 6 out, to help use your networks. Next week 7 happens to be, you know, National Consumer 8 Protection Week. 9 And what we do, guite a few things, we're going to have like a little table outside, 10 11 because we want to make our employees good 12 consumers. 13 Let them know what they can do. We're 14 also starting a series of -- we haven't decided on the title yet, but it's similar to like The 15 16 Talk or The View. Like Patrick calls it --17 CHAIR BARTHOLME: What do you call it? 18 MR. GOLDBLATT: -- Between The Palms, 19 or something. 20 CHAIR BARTHOLME: Is that it? 21 MR. GOLDBLATT: Oh, Between Two Ferns. 22 MR. WEBRE: That's right.

1	MR. GOLDBLATT: Oh, sorry. I don't
2	watch that much. And basically it'll be an
3	interview with a FCC policy maker giving good
4	consumer tips in consumer stake.
5	And the first one we're picking three
6	items, three areas where we have a lot of
7	consumer complaints. Obviously robocalls, we
8	were paying slamming, cramming, charges on your
9	phone bills. I've been here 18 years, and it's
10	always been one of the top areas that people call
11	and complain about.
12	And I think bringing two other
13	surprise topics, so stay tuned and watch it.
14	It'll be on our web page for a while.
15	But we have a whole series, we're
16	building a set, handmade, no Government funds
17	used what-so-ever.
18	Another thing we're doing I also
19	want to reiterate, if anyone knows of any
20	nominations for the AAA awards, there is two more
21	days and they're really nice little glass awards.
22	They're nice. Spread the word.

1	What we do is a series of tip cards
2	now, that we're trying to put out everywhere we
3	can think of.
4	We're working out a deal with the
5	libraries, American Library Association, so our
6	consumer information, our posters, we're selling
7	a whole poster series.
8	We find, I mean, no surprise to most
9	people in the room, that people don't read as
10	much as they should, or use to. But they'll look
11	at a poster, or they'll look at a video, they'll
12	look at a infographic. So it took us a few
13	years, but we're we've come around that we're
14	doing a poster series, infographic series, the
15	videos.
16	We want a whole lot of consumers to be
17	a little bit more educated, so they know when
18	they get a call what they should do, what they
19	should not give out.
20	You know, like, you know, if a utility
21	company calls and says buy gift cards to pay your
22	bill, don't run to the store and buy gift cards.

A whole lot of things FCC can do, but 1 2 the consumer needs to be better educated, and that's our job. We also had to deal with some 3 4 grocery stores, out in California, that are 5 putting our information in their Kiosks. We want to go to where consumers are. 6 7 We learned, a while back ago and a lot of it you 8 worked with us during the DTV transition, that we 9 can't expect consumers to come to us, we have to 10 go to where they're going to be. 11 And then they'll ask questions, 12 they'll take our information and they'll follow-13 Other than -- I really am quick, and AAA up. 14 awards. Oh, we have the newsletter which I 15 believe -- Scott did you pass around our 16 newsletter? 17 MR. MARSHALL: Yes. 18 MR. GOLDBLATT: Yes, Scott's a great 19 guy, if you all don't him. But, we're also 20 changing the focus of our newsletter. In the 21 past it's been these are the things we've done in the past three months. 22

You know, that's okay, but we want to
make it more forward. Like, this is what's
coming up. So it gives you a chance, if you want
to participate, so you know we're going to give
the dates of the next Commission meetings.
But this is where you would be with
Consumer Information, these are people we're
partnering with. I want to be more forward.
We're really, hopping in our little office, you
know. I'm kind of proud. So that's it.
This really is the end of it. But
thank you all oh, we also have some I
always wanted to say this, stay tuned.
We have a lot of things coming up, on
the robocall front, that just wait around and
you're going to be quite impressed. Thank you
all.
CHAIR BARTHOLME: Well with that
teaser. Do we have some time for questions?
Sir.
Okay. If we could remember to throw
our tent cards up if you want to ask a question.

MEMBER SIEFER: Oh, I'm sorry.
CHAIR BARTHOLME: That's okay.
MEMBER SIEFER: I didn't have my tent
card. Hi, Angela Siefer, National and Digital
Inclusion Alliance. I'm curious, like the
posters, is there a way for organizations that
aren't libraries, but are serving communities to
request a poster?
MR. GOLDBLATT: Absolutely. We're
going to be putting them on the web page to
download, or if you want to order some, just
contact we're setting up like a whole page of
how you can order them.
And they're actually very they're
cool. We want to get past oh this is a
Government publication, this is a Government
poster. We want people to stop and think, and
read it.
MEMBER SIEFER: And so notification of
that will come through Scott, to us? Is that?
MR. GOLDBLATT: Yes. I'll
CHAIR BARTHOLME: Can we get a list of

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1	the topics, as they're coming out, to share?
2	MR. GOLDBLATT? Absolutely.
3	CHAIR BARTHOLME: Great.
4	MR. GOLDBLATT: Yes. And if you have
5	ideas of the other topics. Like the first one is
6	the spoofing poster. But if you have ideas that
7	maybe we haven't thought of, that people out
8	there are confused about, we'll be happy to work
9	on that as well.
10	CHAIR BARTHOLME: Okay. Thank you.
11	MR. GOLDBLATT: Okay.
12	CHAIR BARTHOLME: Susan.
13	MEMBER GRANT: Thank you, this was all
14	don't go anywhere Roger.
15	This is great, and we have Members
16	from consumer organizations, as well as State and
17	local consumer agencies that are always looking
18	for consumer education materials. So, would be
19	very excited to share that information with them.
20	I wanted to know, are any of these materials
21	going to be produced in languages besides
22	English, and if not, do you have a plan for

rolling out versions in other languages? 1 2 MR. GOLDBLATT: What a great question. I could have paid you to ask that question. 3 Yes. The answer is yes. Obviously, we'll do 4 everything in Spanish, automatically. 5 But lately we've been doing three 6 7 Asian languages, and plans are to even expand 8 further. We don't want to like -- during DTV we 9 did 28 different languages. And we found some of them were for show. 10 11 Like, people from France really don't 12 come here and speak only French. There are 13 certain Countries it was unnecessary, but there 14 were certain ones that were very popular. And when you go back to that model, 15 16 but the Asian ones came to us because there was a 17 need. There was a whole generation, especially 18 out West. 19 So if you have ideas of languages 20 maybe we haven't thought of, we do have a 21 contract now. We've been working with the Incentive Auction Team, because they want a lot 22

of their consumer information translated. 1 So 2 we've taken control of that. 3 MEMBER GRANT: Okay. 4 MS. PELTZ STRAUSS: Can I add? 5 MR. GOLDBLATT: And we also, when I saw Karen, and she -- well, asked, everything we 6 7 do is, you know, a request for braille, intake, whatever, accessible in all formats. 8 9 MS. PELTZ STRAUSS: In addition. MR. GOLDBLATT: Oh, in addition. 10 11 Something else. 12 MS. PELTZ STRAUSS: No, no, no don't 13 mistake. Just really quickly. I need to sit 14 down in order to speak. All right, just really quickly. In addition we have a new ASL Library, 15 16 American Sign Language Library. 17 It's actually not new, we've done 18 several videos in the American Sign Language, in 19 the past. But we're now more coordinated in our 20 efforts, and so we are now seeing that we have an 21 ASL Library. And we did -- I don't know whether --22

1 I don't think it's ready yet, but we're working 2 on an incentive options video, on that. MR. GOLDBLATT: Yes, that sounds 3 Yes, but we do, like if that's the FCC we 4 great. 5 have if so -- oh we've done about the FCC -we've done several topic ones --6 MS. PELTZ STRAUSS: Right. 7 8 MR. GOLDBLATT: I think it's due in a 9 week. MS. PELTZ STRAUSS: And of course we 10 11 do several of the clearly disability related 12 ones, so. Debbie. 13 CHAIR BARTHOLME: 14 MEMBER BERLYN: Oh, Karen don't go 15 away. Question for you. So, with text-to-911. 16 MS. PELTZ STRAUSS: Yes. 17 MEMBER BERLYN: Can you to talk about 18 how, as it's rolled out, how consumers will get 19 to know about it. Because I think the use of it 20 will go beyond the disability community. 21 MS. PELTZ STRAUSS: There's no I mean, there's absolutely no 22 question. Right.

question the text-to-911. All we have to do is 1 2 read the news to see that there are times that you need to text in quiet situations. 3 We have a 4 website -- and are you going to be having 5 somebody from Public Safety come this afternoon? CHAIR BARTHOLME: 6 Yes. I'm sure that they 7 MS. PELTZ STRAUSS: 8 can provide it, and I'm sure that you can send it 9 out, the link. But there's a website that keeps track of who was rolling out text-to-911. 10 11 And you know that we, at the 12 Commission, do not have jurisdiction over the 13 piece apps of the 911 centers. We only have 14 jurisdiction over the carriers. For disability purposes, it's the 15 16 Department of Justice that has to make sure that 17 911 centers are accessible to people with 18 disabilities. Otherwise it's State and local 19 I hope that answers your question. matter. 20 MEMBER BERLYN: Partly. 21 MS. PELTZ STRAUSS: Okay. 22 MEMBER BERLYN: I'm just wondering if

you're working with the carriers on a plan to 1 2 have them notify consumers that it will be available. 3 4 MS. PELTZ STRAUSS: Right. I think 5 that probably Public Safety can answer that a lot 6 better than I can. 7 MEMBER BERLYN: Okay. 8 MS. PELTZ STRAUSS: Okay. 9 MEMBER BERLYN: Thank you. 10 MS. PELTZ STRAUSS: Sure. 11 CHAIR BARTHOLME: Zainab, did you 12 have --13 MEMBER ALKEBSI: Karen already 14 answered the question, so thank you. 15 CHAIR BARTHOLME: And actually Karen, while you are here, to sort of build on that. 16 17 What does happen when somebody is in a non text-18 to-911 service area? You know, so maybe you're 19 traveling --Right. 20 MS. PELTZ STRAUSS: 21 CHAIR BARTHOLME: -- and you have it 22 at home, but it's not in the area where you're

1	at.
2	MS. PELTZ STRAUSS: Thank you, that's
3	a really good question. So, our rules require
4	that there is a bounceback message.
5	So if you dial a 911 center, and the
6	center is not equipped to accept texts, you're
7	going to be getting a bounceback message that
8	says use either relay, or use voice.
9	So the presumption, to date, is still
10	to use that you're not going to have access to
11	text-to-911. The presumption is try to use voice
12	first. Only use text-to-911 if you have no other
13	alternative. Hopefully, over time, that will
14	change. And the numbers are definitely going up.
15	As I said, we were really excited to
16	see Maryland make its announcement. And again,
17	Public Safety can speak to the many other States
18	that have come on board. And within States, even
19	if they haven't come on as a whole State.
20	Many cities and townships have come
21	on, so. And we're again, we're hoping that real-
22	time text also helps. Our rules do not require

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what kind of text the piece apps have to use, or 1 2 can use. Again, we don't regulate the piece 3 4 They can use SMS, Short Messaging apps. 5 Services, they can use real-time text. But we were very excited to get the 6 7 real-time text option out on the table, because 8 it does provide another alternative. And some 9 locations may use both. 10 CHAIR BARTHOLME: Any other questions 11 in the room? Any questions on the phone? Well, 12 before you guys run out, I do just want to take a 13 second and say thank you very much. It's been a 14 very responsive process, with the recommendations we've made in the cycle of the CAC. And it's 15 16 been fun to sort of get feedback and to interact, 17 and to see so many things that we've recommended 18 become a reality so quickly. So thank you all. 19 MS. PELTZ STRAUSS: Thank you. Thanks 20 for having us. 21 CHAIR BARTHOLME: So, next on the 22 agenda we do have a break scheduled, so we will -

1 2 MR. MARSHALL: We're ahead of schedule. 3 CHAIR BARTHOLME: A little ahead of 4 5 schedule, so we've got a full, sort of, 15 minute 6 We'll be back in here, ready to go, at break. Thank you. 7 10:15. 8 (Whereupon, the above-entitled matter 9 went off the record at 09:57 a.m. and resumed at 10 10:15 a.m.) 11 MR. MARSHALL: Still got a lot of 12 material to cover. CHAIR BARTHOLME: Welcome back from 13 14 break everyone. We're going to keep us on 15 schedule. Next up we're very happy, and pleased, 16 to be joined with Micah Caldwell, by Micah 17 Caldwell. Micah -- many of you know Micah, she's 18 been in the room many times before. And she is currently an Attorney 19 Advisor for the Office of the Bureau of the Chief 20 21 with CGB, and is doing a lot of work focused on 22 consumer inquiries and the complaint centers.

1	MS. CALDWELL: Good morning everyone.
2	I see some familiar faces out there.
3	So, I have been in the CGB front
4	office for a couple of years now, and I've worn a
5	variety of hats. I think most of the work, that
6	I've done with the Committee, has been in the
7	robocalls context.
8	That use to be part of my portfolio.
9	But since D'wana Terry has moved to the Wireline
10	Competition Bureau's front office, I have taken
11	over for her as their front office manager, for
12	the Consumer Inquires and Complaints Division.
13	And I'm Micah, as Ed said, Micah
14	Caldwell. So, I'm relatively new to this
15	position. I'm still learning the ropes, as it
16	were.
17	So, I don't know that I have a lot of
18	substantive updates to provide today, other than
19	I wanted to come down and take the opportunity to
20	introduce myself, for those of who that don't me.
21	And let you know that I am looking forward to
22	working with you, in the coming months.

1	I've taken a look at the
2	recommendations, that the CAC adopted in May, and
3	I've checked in to see what the status is on all
4	of those.
5	And was pleased to see that, before I
6	came on board in this role, that we've already
7	implemented a few of them. There still are a
8	couple that are outstanding, that we're still
9	looking into.
10	One of which is the concept of an app,
11	for consumers who want to file an unwanted calls
12	complaint, to use their mobile device.
13	And an app on the mobile device to
14	file their complaints, and have it, you know,
15	directly be funneled into the Consumer Complaint
16	Center. And that's something we are still
17	looking into.
18	As you can probably imagine, that is
19	something that takes a little bit of time. And
20	we also want to, and I think D'wana mentioned
21	this when she was here last fall, to make sure
22	that we have the right strategic partner to

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1	undertake that endeavor. So it's something
2	that's still on our radar. Another new
3	development, other than me, is we also have a new
4	permanent division chief of CICD. She's not down
5	here this morning, but her name is Sharon Wright.
6	You're probably very familiar with
7	her, because she has been the acting Division
8	Chief for quite a while now. And she was
9	appointed as the permanent Division Chief in
10	January.
11	So you've got two new faces, when it
12	comes to Consumer Inquiries and Complaints.
13	Although Sharon's been around much longer than I
14	have been.
15	I'm looking here to see if there were
16	some other recommendations, that you all had
17	adopted in May, that we are still looking into.
18	The app is the primary one.
19	The one that we were able to
20	implement, relatively quickly, was the separate
21	button for unwanted call complaints. So, it's on
22	the Consumer Complaints Center. We've actually

gotten quite a bit of positive feedback to that. 1 2 And we've also gotten a lot of positive feedback, from consumers, about some of 3 the changes we've made with respect to the 4 content that we provide to consumers, when they 5 file a complaint. 6 7 I don't know if any of you have 8 actually filed an unwanted calls complaint 9 yourself, but when you do that you get an email notification that tells you that your complaint's 10 11 been submitted successfully. And it's an opportunity for the 12 13 Commission to educate consumers about that 14 particular issue and let them know, like, what's 15 going to happen next. 16 And I think the biggest improvement, 17 that we've been able to make with respect to that 18 sort of dialogue, if you will, with the consumer, 19 is to manage expectations a lot better. And 20 there's been a really positive response to that. 21 So, you know, we tell consumers, quite frankly, we can't stop every unwanted call. 22 We

realize that when you're contacting us, with a
 complaint about that particular situation, you're
 already very frustrated.

But we do make it clear that it's very 4 5 important to us that we get this information from consumers, so that we can use it as part of our 6 7 complaint data, which we push out on our 8 Complaint Data Center, in which a lot of third 9 party apps, and other companies and organizations use, with respect to their call blocking and call 10 11 filtering, the applications and other resources.

12 And I think we got, as recently as two 13 weeks ago, an email that went directly to the 14 Chairman that said that this person was really 15 possibly surprised with the changes that had been 16 made,

17 and that the new Complaint Center is 18 a lot more user friendly than the previous one 19 was. 20 I think there's definitely still an 21 interest, among consumers, to be able to file 22 multiple numbers at a time, with a single

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complaint on one form.

2	That turns out to be a little bit more
3	complicated than one might think it would be.
4	But that is something else that we're still
5	looking into.
6	And hopefully one of those two ideas,
7	that we're exploring right, will be able to move
8	forward in relatively short order. I look
9	forward to having a dialogue with all of you
10	going forward. I'm open to ideas for ways that
11	we can improve the Complaint Center. That's
12	something that we're always looking at, of
13	course.
14	And it's one of my goals, in
15	undertaking this new position, is to make sure
16	that the Complaint Center is working to the best
17	that it can, for consumers.
18	And that they're getting the relief
19	that they need, and that they're getting the
20	information that they need, and that it's seen as
21	an outlet, or a place where they can go to
22	actually get some resolution.

1	As opposed to continued frustration.
2	And so, if anybody has any questions that they
3	want to ask me, I'm open to some questions.
4	Hopefully I can answer them. And if not, then
5	I'll turn it back over to Ed.
6	CHAIR BARTHOLME: Sure. Steve?
7	MEMBER POCIASK: Hi, I'm Steve with
8	ACI. Okay, so you just mentioned, in closing
9	there, about consumers getting resolution. And I
10	know that we want these filed, in part, because
11	we want to measure the size of the problem.
12	But what really is, like, the
13	probability of some remedy, or action taking
14	place at this point. Because when I get these
15	calls I really don't have a number to report.
16	So I you know, the numbers are
17	spoofed, or something funny, but. So how does
18	that really work? Are we just filing these
19	complaints so we can size the problem?
20	Or is there, in fact, some resolution
21	that's taking place in many instances? I just
22	don't understand that.

MS. CALDWELL: Right. It may not be
the individualized resolution that some might
prefer. But there are a number of ways that we
can use that information to provide relief for
consumers, sort of more broadly.
One is that we use it in our policy
making decisions, that we've been very active
over the past year.
And I think maybe Mark was in here
earlier to give you an update on some of the work
that we're doing and, with respect to unwanted
calls.
The data that we gather, in the
Consumer Complaint Data Center, is used as part
of that decision making in trying to figure out,
you know, how can we better inform policy so that
we can make some changes that will more globally
impact consumers, in a positive way?
Another way that we use that data, and
probably the primary use for it, is for
enforcement actions.
And that would be something that the

Enforcement Bureau would need to speak to, but 1 2 they have access to all of that data. And they've also been very active, 3 4 over the past several months, with enforcement actions against bad actors who are making illegal 5 robocalls, and doing caller ID spoofing as well. 6 7 CHAIR BARTHOLME: Are there questions 8 in the room or on the phone line? 9 I had something, so. In addition to filing multiple numbers at once, which is 10 11 something that we did flag, and I appreciate the 12 fact that you guys are still working towards 13 that. 14 Another thing that we had teed up was possibly the ability to do a single complaint 15 16 submission, that would go to both the FTC and the 17 FCC --18 MS. CALDWELL: Right. 19 CHAIR BARTHOLME: -- for consumers. 20 Because right now there's sort of two different 21 pathways to complain. And, you know, consumers may not want to have to deal with doing all of 22

1 that twice.

2	Especially if they have to do it for
3	every single call that they get, on a one number
4	at a time basis. So with the report coming up,
5	that's sort of a joint activity
6	MS. CALDWELL: Right.
7	CHAIR BARTHOLME: I was wondering
8	if that might be an opportunity to move the ball
9	forward with that item, as well.
10	MS. CALDWELL: You know, it's always
11	a possibility. I mean, we work pretty closely
12	with the FTC to figure out ways to coordinate and
13	collaborate better.
14	And that is something that we will
15	definitely be doing in the current
16	administration, and with this Joint Robocalls
17	Report.
18	I can see that as being an opportunity
19	to explore that some more. So, I appreciate the
20	idea.
21	CHAIR BARTHOLME: And I will not let
22	you leave before taking a second to thank James

Brown, on your team, for his great work in sort of helping us to think through some of the ideas, like the button on the website, and
like the button on the website, and
actually making those a reality for consumers.
So, I wanted to make sure he got in there.
MS. CALDWELL: I will pass that along
to James. James is fantastic, and I thank him as
well for all of his help in making sure that
we're able to implement the recommendations that
you all have made. We'll continue to move in
that direction.
CHAIR BARTHOLME: All right, thank
you.
MS. CALDWELL: Thanks so much.
CHAIR BARTHOLME: So next, we're
looking forward Chris Anderson is joining us.
And he is with the Operations and Emergency
Management Division, in the Public Safety and
Homeland Security Bureau. I have a card for you
there.
MR. ANDERSON: All right, thank you.
CHAIR BARTHOLME: I think this is your

1 first time joining us here, at the CAC. So 2 hopefully we'll be kind and gentle. Let's hope. 3 MR. ANDERSON: Good 4 morning everyone, I'm Chris Anderson. I'm the 5 Chief of Operations and Emergency Management, here at the FCC. 6 7 A quick introduction for myself. I've 8 been with the Commission about four years, and 9 been in Ops and Emergency Management that whole time. 10 11 I came to the Commission from an op 12 centric role, for a job that I had with the 13 Department of Homeland Security, looking at 14 critical infrastructure protection more broadly, and sort of DHS led incident 15 16 management structures. So, this has been my 17 background for a while. 18 I work within the Public Safety 19 Homeland Security Bureau, as was mentioned, which 20 has the overall responsibility within the 21 Commission. 22 We don't necessarily do it all

ourselves, but we coordinate among all of the 1 2 other bureaus and offices when major disasters and incidents strike. And that's what I'm here 3 4 to talk a little bit about today. To give you a 5 sense of what the Commission's role is, and the kinds of things that we do, during disaster 6 7 response. 8 So, first of all, our role in disaster 9 response traces its lineage, as with most things here in the Commission, back to the 10 11 Communications Act which charges, among other 12 things, for us to promote life safety and 13 14 national security in the use of communication So we tie it back to that initial 15 systems. 16 reason for being for the Commission. 17 But how it all sort of comes together 18 is through -- there's a national -- a set of 19 national level strategies, plans and doctrines 20 called the National Preparedness Framework, which 21 lays out for all federal departments and 22 agencies, how we coordinate with each other, and

with federal, state, local, territorial, and
 tribal governments.

3	When disaster strikes, how does this
4	all come together? The Preparedness Framework,
5	in turn, looks across sort of five major areas
6	preventing disasters, protecting against them,
7	mitigating their effects, responding when
8	disaster happens and then long term recovery. So
9	those are really the five components.
10	And mostly what I'm going to talk
11	about, here today, are the responding recover
12	pieces, which are in my portfolio. Our key
13	partners I think, it's important to understand
14	how the framework all comes together.
15	And we work very closely with a number
16	of federal departments and agencies.
17	But primarily with FEMA, the Federal
18	Emergency Management Administration and DHS
19	critical infrastructure protection, and their
20	Office of Cybersecurity and Communications.
21	So, sort of DHS proper, and FEMA's
22	technically part of DHS, but FEMA as its own

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1	entity, and then DHS are our key partners.
2	Within that framework what the FCC
3	brings to the table is we have the ability to
4	compile and analyze communications,
5	infrastructure, outage and restoration
6	information; we assign radio frequencies to our
7	licensees; we assist with the provision of
8	communication support to federal, state, tribal
9	and local governments; we conduct outreach; and
10	we will deploy personnel at FEMA's request or
11	direction under a mission assignment process to
12	send people into the disaster areas to get a
13	little bit more hands on with coordination.
14	So I think that's sort of a little bit
15	of a framework, but it makes a lot more sense to
16	sort of step through a disaster and really kind
17	of get down to the, well, what do we do? And
18	I'll begin a lot of this will focus on
19	hurricane response. That sort of has been near
20	and dear to our hearts over the last year.
21	Certainly the hurricane season of 2017 was
22	unprecedented in many ways.

1	When we think about disaster and
2	disaster preparation, I'm going to mostly limit
3	my remarks to as we see an actual incident
4	coming. Either a threat level has been raised
5	for some reason because of weather events or we
6	can see it coming. We track those hurricanes
7	quite directly. All summer long I'm at the
8	National Hurricane Center web page first thing in
9	the morning with my coffee every day. So we're
10	watching them coming and predicting.
11	I'm not going to go into a lot of
12	detail because it's sort of outside my portfolio,
13	but it is important I think to recognize that
14	many things that the Commission does in its day
15	to day activities promote the kinds of
16	resilience, redundant communications networks,
17	public messaging, public alerting, those kinds of
18	things that enable sort of the underpinning of a
19	resilient communications infrastructure.
20	But really when I talk about
21	preparatory activities, I'm talking about in the
22	lead up to a disaster. So there are a couple of

things that we do: We begin to coordinate with 1 2 our federal partners: DHS and FEMA, as well as industry providers through daily or sometimes 3 multiple times a day conference calls, just 4 5 exchanging information, seeing are there road blocks, are there obstacles to being ready for 6 7 the storm or whatever the incoming incident is? 8 We'll conduct outreach to a number of our 9 constituencies. So we'll reach out to public safety officials, we'll reach out to service 10 providers, broadcast associations. 11

12 We have -- over the last year as 13 hurricanes have approached we've released a set 14 of public notices to provide visibility into how to contact us if there are problems, how to seek 15 16 waivers or special temporary authorities, those 17 kinds of things so that before the disaster even 18 strikes we've kind of refreshed everyone's memory 19 on how to deal with those incidents.

20 We've also set up -- this is 21 relatively new. For each of the hurricanes this 22 year we've set up specific web pages on the FCC

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home page where we could put all of the information related to a given incident so that it was easy to find in one stop, linkable from the FCC home page to try to get that information out there. So that's sort of the preparatory phase.

7 In the actual disaster response I look 8 at our role as really sort of three major things 9 that we do: First, we promote, develop and share 10 situational awareness. What is the status of the 11 various elements of the communication system? 12 What's up? What's down? What's working? And we 13 share that information as broadly as we can.

Second, we take regulatory actions to enable the -- our licensees the flexibility to respond to incidents and to reconstitute their communications capabilities as rapidly as possible.

And then sort of the other bucket,
which actually fills up a lot of our time. It's
facilitating other assistance. It's things like
helping communications providers get access to

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their transmitter sites so that they can repair 1 2 them, working with FEMA on logistics issues, on everything from Customs -- helping get generators 3 4 through Customs on Puerto Rico, you name it. In terms of -- so I'm going to talk in 5 a little bit more detail about each of those 6 7 three buckets. Situational awareness. Probably the 8 9 cornerstone of our ability to understand what's 10 going on is our Disaster Information Reporting System, which we call DIRS. So DIRS is an online 11 12 portal that industry members use to report to us 13 their status after a major disaster. Normally 14 during steady state we have a separate system called NORS, the Network Outage Reporting System. 15 16 When a disaster strikes, we will waive -- NORS is 17 a mandatory reporting requirements for certain 18 carriers. So we will waive NORS requirements and 19 instead encourage all of our communications 20 providers to report in DIRS. 21 DIRS gives us much more detailed 22 information down to the county level about what

major pieces of equipment are up, are down, 1 2 what's the status of wire line, wireless, cable providers, broadcasters, you name it, and also 3 affords them the ability to communicate more 4 5 directly with us about what their needs are and what their requests for assistance are. 6 Hey, where -- we have this many cell sites that are 7 8 down that are on generator power and we're going 9 to need help coordinating to try to get fuel, those kinds of things. 10

11 In addition to DIRS -- so DIRS is what 12 industry tells us. We take that information on a 13 daily basis, we compile it, analyze it, boil it down into sort of statistical looks at how the 14 different sub-sectors within communications are 15 16 doing, and then we share those back out. Over 17 this past year's hurricane season, for all of our 18 communication situation status reports, we were 19 able to generate a publicly available version of 20 those reports and share that out on the web site 21 so that anyone coming to fcc.gov/maria, or any of 22 the other named storms, would be able to daily

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get an update on communication status.

2	The second way that we develop
3	situational awareness is through direct measuring
4	and monitoring of the radio frequency spectrum,
5	which we do in a couple of ways. During a
6	typical response to a hurricane or another
7	disaster we will deploy a team, a vehicle-borne
8	team with antenna, receiver, spectrum analyzer
9	who will drive to the areas of interest, sort of
10	run the spectrum analyzer and look at a broad
11	swath of the RF spectrum.
12	And what they're able to report back
12 13	And what they're able to report back to us is the public safety entities that we
13	to us is the public safety entities that we
13 14	to us is the public safety entities that we expect to see broadcasting. Are they up, are
13 14 15	to us is the public safety entities that we expect to see broadcasting. Are they up, are they down, are the life flight dispatch
13 14 15 16	to us is the public safety entities that we expect to see broadcasting. Are they up, are they down, are the life flight dispatch frequencies active, are the smaller police
13 14 15 16 17	to us is the public safety entities that we expect to see broadcasting. Are they up, are they down, are the life flight dispatch frequencies active, are the smaller police departments that we can't necessarily get to
13 14 15 16 17 18	to us is the public safety entities that we expect to see broadcasting. Are they up, are they down, are the life flight dispatch frequencies active, are the smaller police departments that we can't necessarily get to right away are they active and broadcasting?
13 14 15 16 17 18 19	to us is the public safety entities that we expect to see broadcasting. Are they up, are they down, are the life flight dispatch frequencies active, are the smaller police departments that we can't necessarily get to right away are they active and broadcasting? So we're able to provide that land/mobile radio

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We also use that RF sensing to look at

AM, FM and TV broadcasting so that we're aware of 1 2 what's available in terms of public messaging. Are there stations available where people can get 3 news, where people can get alerts, where 4 information can get out to the public? 5 In addition to those deployed teams we 6 7 will use a high-frequency direction finding system that we maintain. For other purposes and 8 9 other pieces of our interference resolution mission we maintain a network of high-frequency 10 direction finding stations nationwide. 11 Because 12 of the nature particularly of AM broadcast 13 stations, depending on exactly what the 14 atmospherics are like and how close it is to one of those stations, we can very often sense or 15 16 listen for AM radio from very great distances. 17 So we were able to do that to pretty 18 good effect for Hurricanes Harvey and Irma this 19 We had less success frankly during Maria year. 20 for the simple fact that one of our listening 21 stations is on the island of Puerto Rico and was 22 pretty severely damaged during the storm itself.

So we were unable to use that for monitoring. 1 In 2 fact, I just got an email this morning. We had our commercial power restored to that facility 3 4 just this morning, or just this weekend. 5 The last thing that we'll use to monitor RF spectrum is a series of remote 6 7 receiver analyzers that we can dial in either 8 through old school dial-up modems or through IP 9 connections into those receivers to be able to look and hear the radio spectrum without having 10 11 to put personnel in harm's way. So we used 12 those, for example, quite successful during 13 Hurricane Irma throughout South Florida to get 14 very rapid assessments of broadcast capability post-landfall. 15 16 In addition to those sort of what 17 industry reports to us, what we're able to sense 18 for ourselves, there are lots of other sources 19 for information that we use. We will routinely 20 reach out to state 911 coordinators, check in

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with them on a daily basis, make sure they're not

any unidentified issues. We'll reach out through

the national or the state broadcast associations. We'll coordinate with FEMA. In many cases we're also gathering situational awareness of other critical infrastructure sectors that are important to communications, most specifically the energy sector and transportation. So that's sort of the situational awareness piece.

8 In terms of regulatory flexibility, 9 during response to disasters we very often see a range of our licensees need to operate in ways 10 11 that are different than they normally operate. 12 So over this last hurricane season we issued 13 literally hundreds of temporary authorities to 14 different licensees for a range of things from first responders who are volunteering to show up 15 16 in Puerto Rico, but all of their radios are licensed back at their home location in New York. 17 18 They need authority to use those frequencies 19 somewhere else. And if those frequencies are 20 busy where they're going, we need to help them 21 find frequencies they can use.

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Wireless providers. In many cases

they're trying to reestablish not just the power 1 2 and the capability of the cell site itself, but that cell site has to connect back to the rest of 3 the communications infrastructure. And often 4 5 during disaster response you have to come up with ways to do that aren't how you planned to do it. 6 So lots of things like microwave links to provide 7 8 backhaul for cellular providers.

9 Broadcasters often request changes in 10 status either because they can't broadcast 11 because they're down or they want to change or 12 increase or decrease their power levels based on 13 their operating on generators or, hey, I know I'm 14 the only station in this area. I'd like to up my 15 power a little bit to get a broader footprint so 16 that I can get more information to more people. 17 So that's the sort of special temporary authority 18 piece.

19 In addition, there's a range of other 20 orders and waivers that may be required based on 21 the situation, anything from the simplest --22 extending administrative deadlines where we can,

not making someone who's trying to pump water out 1 2 of their radio station have to make a filing that's simply administrative in nature, looking 3 at changing numbering rules so that, for example, 4 5 when a number goes dormant in an impacted region it doesn't get recycled and reissued right away. 6 7 It can be held onto a little bit longer than our rules normally require. So if somebody evacuates 8 9 and shuts down their service for a few months and 10 then comes back, they haven't lost their phone Looking at how we can use -- and in 11 number. 12 cases this fall accelerate availability of USF 13 funding to help those providers sort of have that 14 initial infusion of cash to help fund their response activities. 15

16 The next piece that we -- oh, a couple 17 of other key regulatory pieces. Experimental 18 licenses. Certainly during disasters they're --19 very often we're looking for any means that we 20 can to help restore communications. So looking 21 at things like the Puerto Rico Project Loon ran 22 some wireless connectivity trials under

experimental licenses that we issued to provide -- sort of in the more rural areas, mountainous areas of Puerto Rico to provide at least some cellular coverage.

The last piece is working with even 5 just sort of sharing the situational awareness of 6 7 regulatory actions that are the -- in the cognizance of other regulators, but are of 8 9 interest to those in the communication sector. So as a specific example from last fall looking 10 11 at the EPA waiving some of the rules that they 12 have on the books regarding portable generators, 13 what kinds can be imported into the U.S. mainland 14 or U.S. territories. And they provided some flexibility broadly, but making sure that 15 16 communications providers were aware that that 17 regulatory framework had changed a little bit so 18 that they could adjust accordingly as they 19 brought temporary power into the islands.

The last piece that we do a lot of significant work I think during incidents is the sort of request for assistance or information.

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So as you can imagine when sort of all heck has broken loose and people have problems that they need help with we will often get calls from citizens, from providers, from other government agencies with communications-related issues. And we try to help in those where we can.

7 What we see a lot of from the 8 providers is contacting us looking for access to 9 their facilities or sites, where sometimes they either physically can't get there because the 10 water is too high or roads are blocked by debris 11 12 and they need help getting those roads cleared so 13 they can get back and restore communications or 14 coordinating through state and local officials. The road blocks are up, the parish sheriff won't 15 16 let anybody across the parish line or across the 17 county line. So working with them to help them 18 understand this is really important that you 19 allow the communications restoration teams in so 20 that we can get radio stations back up and 21 wireless communications back up and broadband 22 Internet services back up. So it's those access

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pieces.

2	Fuel and energy another huge issue for
3	providers, not only getting their hands on
4	generators where they didn't already have them,
5	but often even where providers had generators,
6	they're not designed to run continuously for
7	three weeks, four weeks, three months, four
8	months. So then it becomes new generators,
9	generator parts, generator oil, fuel to keep
10	those things going, prioritization for
11	restoration, all of those elements.
12	Now we don't have a magic wand to make
13	that happen. The way that those requests
14	actually flow, we'll collect them, we'll provide
15	a little bit of a sanity check. And as the
16	regulator hears the impact of this particular
17	piece of equipment being without power, we funnel
18	that down through FEMA to the state and locals,
19	because the way that disaster management writ
20	large works all disasters are local disasters.
21	And it really is up to the local mayor
22	to make initial prioritization decisions about

how he or she thinks things need to happen in 1 2 their area. When they're overwhelmed, they will turn to their county and then their state 3 4 government for help. When the state government 5 is overwhelmed, they turn to the feds. So a big part of what this behind-the-scenes effort winds 6 7 up being is helping the state and local incident 8 responders understand the strategic impact of a 9 given communications asset so that they can make the right kinds of prioritization decisions that 10 are theirs to make. 11

12 So if you imagine a county emergency 13 manager or state emergency management official 14 trying to determine who gets fuel. Is it the Is it the telephone central office? 15 hospital? Is it the -- some other critical facility? 16 We 17 can't make those decisions. We don't have the 18 authority to. What we can do is get those to the 19 right place for the decision to be made with the 20 right background information so that people can 21 make good decisions. So that's sort of the 22 request for assistance/request for information

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2	The last thing that I'll mention,
3	which sort of in some ways straddles the line
4	between longer term preparatory activities and
5	the shorter term is the role that we have in
6	establishing and then sort of operationalizing an
7	agreement we had with wireless providers called
8	the Wireless Resiliency Cooperative Framework.
9	So the cooperative framework was
10	adopted in December 2016 between the major
11	wireless providers, CTIA and the Commission, and
12	it essentially provides a five-pronged approach
13	for enhancing coordination during emergencies.
14	The first thing, the carriers agreed
15	to provide reasonable roaming under disaster
16	arrangements where that's technically feasible.
17	So we saw this a lot in responses to all three of
18	the hurricanes this year, certainly in Puerto
19	Rico over months and months. Affording that
20	roaming capability so that if company A has a
21	cell site restored in a given town, company B can
22	focus on a cell site in a different town. Each

of their customers can roam onto those respective
 cell sites so we get more services up for more
 people in a faster manner.

The carriers will also agree to 4 5 provide mutual aid to one another where they can and where it's feasible. So we saw this in --6 7 again in this past hurricane season, things like 8 sharing logistics flights, sharing logistics 9 shipments, sending -- sharing generators at a 10 given tower site. Many times the physical tower 11 is owned by one company. On the tower are 12 antennas for multiple providers and coordinating 13 amongst themselves, hey, we'll put one generator 14 there, we'll put another generator somewhere else rather than each of us putting one generator at 15 16 the same site. It's just not efficient. So that 17 neutral aid agreement is part of the cooperative 18 framework.

Additionally, they have agreed to help municipal preparedness in a couple of ways, both in terms of coordinating with PSAP, or public safety answering point managers, 911 call centers

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to ensure that they have the latest information and a rapid mechanism to coordinate with carriers to ensure that calls are able to flow to 911 centers.

The next prong is consumer readiness 5 and preparation. So CTIA for example has a 6 number of outreach campaigns about how to 7 communicate during an emergency, basic things 8 9 like if you can't make a call, maybe you can 10 text; how to preserve the battery for your cell phone because even if cell service is up, if 11 12 power is out, once your cell phone runs out of 13 batteries, you lose the ability to communicate. 14 So those kinds of consumer preparedness things. And then the last piece is the public 15 16 awareness component. I had mentioned earlier the

18 cooperative framework to release some of that 19 information in those publically available reports 20 so that consumers and the public at large have an 21 ability to sort of track and see communication 22 status over time.

DIRS reporting, the agreement under the

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1	So that's sort of quick broad strokes
2	of what we do during an incident. I just want to
3	touch on a couple things. I have just a few more
4	minutes left.
5	In order to ensure that we captured
6	lessons learned from this past hurricane season
7	we have we published a public notice back in
8	December. It closed for comments in January and
9	actually just last week closed for reply
10	comments. But we were seeking a broad set of
11	inputs from communication providers, from
12	consumers of your situational products, from
13	consumers themselves. How did the communication
14	systems fare? What can we learn from this last
15	set of disasters?
16	And while we're still sort of going
17	through those comments to understand what the
18	record is showing us, a couple of things are
19	starting to jump out right away. The first is a
20	number of responders reported the importance of
21	resiliency measures taken in advance, everything
22	from pre-positioning equipment to pre-positioning

restoration equipment, just things as simple as, hey, don't put your generators in the basement in a flood-prone area. So those sorts of resiliency measures.

Lots of feedback on the performance of 5 the wireless resiliency framework. We got lots 6 7 of comments back on situational awareness overall. Certainly a number of responders 8 9 underscored the critical interconnections between communications restoration and the electric power 10 11 restoration, that those are just inextricably tied together, and the importance of 12 understanding those links is really coming 13 14 through in the record.

So we hope to continue to build upon 15 16 that record, engaging in public discussions and 17 working closely with our partners to sort of 18 capture those -- sometimes I'm hesitant to use 19 the term "lessons learned" -- lessons potentially 20 learned until we have captured them, written them 21 down, learned them, created the plans to fix problems where they exist and to codify the 22

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1	things we did on the fly that, hey, that worked
2	really well. We need to do that every time.
3	Until we do all of that work they won't truly be
4	learned.
5	But that's the that's sort of a 20-
6	minute overview of what we do in terms of
7	restoration. I don't know if I have a little bit
8	of time for a question or two.
9	CHAIR BARTHOLME: Thaddeus?
10	MEMBER JOHNSON: Yes, Thaddeus Johnson
11	with NASUCA. Can you talk a little bit about the
12	coordination at the local level? You gave an
13	example, let's just say for let's say safety
14	reason a sheriff might say nobody can go past
15	this point, but communications needs to
16	personnel may need to get there. Is that more of
17	a top-down, bottom-up? Are the protocols as
18	strong for dealing with local cities, parishes as
19	like with on a state level?
20	MR. ANDERSON: Great question. And it
21	happens sort of in both directions. So before
22	the disasters even strike working primarily

through DHS they do a tremendous amount of 1 2 outreach to the law enforcement communities, the public safety communities. We piggyback on that 3 and really encourage them to understand the 4 5 importance not just of communications critical infrastructure, but the pipeline, the power 6 7 crews, the water restoration folks, you name it. 8 The critical infrastructure responders need to be 9 able to get back in. So there's a baseline of outreach that goes on all the time. 10

11 The sort of next step, we work with 12 our DHS partners at the National Coordinating Center for Communications who will typically --13 14 as a disaster strikes they will draft letters on DHS letterhead that we're able to share with 15 16 communications providers that basically say the bearer of this letter is a communications 17 18 provider seeking to restore dot, dot, dot. Those 19 are non-binding. That's the problem. The feds 20 don't have the authority to say, hey, local 21 sheriff, you have to do this. But those kinds of 22 things can be helpful.

1	The last piece is as the response
2	gears up and you have a state emergency
3	operations center we'll have FEMA personnel
4	imbedded there. We will have other DHS personnel
5	imbedded there. As we gear up we'll mission
6	assign, so we'll have personnel in either the EOC
7	or the Joint Field Office. And it's those kind
8	of communication pathways that sometimes that's
9	what it takes is call down to our person at the
10	Houston Joint Field Office who can walk across
11	the room and talk to the sheriff's office
12	representative or a state police representative
13	and say we have somebody at a road block right
14	now who needs to get through.
15	Does that always work? No, because we
16	don't have a command and control relationship
17	that way, but we do really work hard to establish
18	the person-to-person relationships that (A) most
19	of those problems don't happen in the first
20	place; and (B) where they do, we can very rapidly
21	make the chain of people, the calls and
22	connections in order to resolve it.

1	CHAIR BARTHOLME: Barry?
2	MEMBER UMANSKY: Yes, as a follow-on
3	to that last question, in the wake of $9/11$ one of
4	the findings included that emergency services
5	weren't able to connect with each other. Police
6	couldn't talk to fire. Different frequencies,
7	different equipment. And with the Federal
8	Department of Homeland Security, the FCC's a
9	parallel bureau here.
10	And 10 days ago in Florida we had the
11	shooting at the high school. A lot of media
12	reports have stated that the county sheriff was
13	unable to communicate with the city police. Same
14	problem. Different frequencies, incompatible
15	equipment. It's 2018. How is this still
16	happening?
17	MR. ANDERSON: Good question.
18	MEMBER UMANSKY: Okay.
19	MR. ANDERSON: And one which obviously
20	with respect to the recent incident in Florida
21	I don't have any of the details, so I'm sorry, I
22	certainly can't

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1	MEMBER UMANSKY: Understand. It's not
2	your bailiwick. It's not a natural disaster.
3	But I would have thought we would have solved
4	those problems under the federal governance egis
5	working with states and localities.
6	MR. ANDERSON: So I think that's work
7	that continues on a number of fronts. Certainly
8	I will dodge this a little bit. I'm not sure
9	if our next speaker is is David Furth next?
10	CHAIR BARTHOLME: It's two speakers
11	down and we
12	MR. ANDERSON: Okay.
13	CHAIR BARTHOLME: have someone
14	coming
15	(Simultaneous speaking)
16	MR. ANDERSON: So I will just defer to
17	my colleague from our Policy and Licensing
18	Division other than to say from an incident
19	management perspective I will add that when the
20	big disaster comes, a huge level of effort goes
21	into the Frequency Management Plan because even
22	in those cases where it's just the state and

locals who already work together on a normal 1 2 basis, when you have a response like Maria or Irma or Harvey where you have other state and 3 local volunteers coming in from out of area with 4 5 their own assigned frequencies and equipment, where you have tons of feds showing up with their 6 7 own assigned frequencies, simply coming up with a 8 frequency management plan of who's talking 9 internally on what frequencies and who's talking others on what frequencies is a huge part of the 10 11 level of effort of the coordination. 12 MEMBER UMANSKY: Okay. 13 CHAIR BARTHOLME: Do we have any 14 questions on the phone line? 15 (No audible response) 16 CHAIR BARTHOLME: Ross? 17 MEMBER LIEBERMAN: Hi, Ross Lieberman, 18 American Cable Association. First of all, I just 19 wanted to say I guess congratulations, or I --20 the activities that I've just seen come out of 21 the FCC in the last year have been a lot of new 22 things it seems and creative ways to be helpful.

And so the Commission really should be applauded for its efforts this year.

In terms of preparedness I certainly 3 want to just throw out the opportunity that 4 certainly an association like mine who represent 5 small and medium-sized cable operators certainly 6 7 impacted probably could benefit from more 8 information in terms of the resources that are 9 available through the Commission, and as well as using DIRS and other things like that prior to 10 11 hurricane season or other things like that. And 12 we certainly would like to work with the 13 Commission to find ways that we could further 14 educate many small cable operators to know what is out there for them and how they can help in 15 16 terms of addressing the -- when disaster strikes. 17 MR. ANDERSON: Fantastic. And I will 18 absolutely take you up on that. We are already 19 planning for later in the spring: May, possibly 20 into June, sort of in the April, May, June time 21 frame, to bring in the different industry segments for what we -- a preparedness meeting, 22

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which is really a way for bidirectional 1 2 information sharing. We can tell you what we've been up to. We'll be interested to hear success 3 4 stories or the kinds of things that different 5 communication sub-sectors are doing to promote resiliency or issues that, oh, if only we could 6 7 solve this, we would be able to do that. So 8 those kinds of information exchanges are I think 9 really important. And after I get up I'm going to swing around and grab a card. 10

11 All right. CHAIR BARTHOLME: Thank 12 Thank you for joining us. you, everyone. That 13 was very informative. And this is clearly an 14 issue that the Commission is spending a lot of time on these days, and I expect that we'll hear 15 more as deliberations and sort of lessons learned 16 17 processes continue. Thank you.

So next we're happy to be joined by
Gregory Cooke. He is the Deputy Chief of the
Policy and Licensing Division with the Office of
Public Safety -- or I'm sorry, the Public Safety
and Homeland Security Bureau here at the FCC.

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1	And he's going to be joining us today to talk
2	about Blue Alerts and Wireless Emergency Alerts.
3	MR. COOKE: Thanks, everybody. Thanks
4	for being here. Thanks for the opportunity.
5	Just to give you a little bit of
6	background what my portfolio is public alert
7	and warning. And the FCC regulates two public
8	alert and warning systems. The one we're fairly
9	familiar we're fairly familiar with both of
10	them. EAS is the one you get over your TV and
11	your radio and it's the one that has that big
12	sort of loud noise and that eh, eh, eh that you
13	hear. And you get weather alerts and AMBER
14	alerts and whatnot from that. And the other one
15	is the alerts that you would get over your
16	wireless telephone, Wireless Emergency Alerts.
17	And in both of these instances what the FCC
18	regulates are the service providers who regulate
19	the broadcasters, the cable providers, DBS,
20	Sirius XM, etcetera, for the purposes of EAS and
21	the wireless providers for WEA.
22	Now in the case of WEA this is a

Wireless providers elect to 1 voluntary program. 2 participate in this program. Once they do, they have to follow the rules, however. For EAS all 3 4 EAS participants must participate in EAS because 5 they have to be able to deliver an alert that would be delivered in the case of a national 6 emergency by the President. 7 So they all have to 8 have the equipment in place to be able to deliver 9 this message. But any other message, be it weather or AMBER or anything like that, is 10 11 voluntary. So we've got these two systems going. 12 And so what we've done over the last year is a number of things with both EAS and Wireless 13 14 Emergency Alerts.

Now EAS is comprised of about 25,000 15 16 participants. If you add up all of the radio and 17 the TV stations and the cable providers and your 18 direct broadcast satellite Sirius XM, it's quite 19 a bit. And so we have been for the last couple 20 of years running nationwide tests of the system 21 to make sure that everybody who is a participant can receive the test from its source and to then 22

1 deliver it to the public.

2	And the sources would be the National
3	Weather Service or NCMEC, the National Center of
4	Missing and Exploited Children for AMBERs, or
5	state and local government. And they get these
6	either broadcast over the air from other sources
7	that they monitor or through a system known as
8	the Integrated Public Alert and Warning System,
9	which is an Internet-based alert aggregator that
10	is operated by the Federal Emergency Management
11	Agency.
12	And so we did our first test in 2011,
13	we did our second test in 2016, and we did our
14	most recent test on September 27th, 2017. The
15	Commission released a public notice about the
16	initial results on that test on December 7th,
17	2017, and the initial results showed that in fact
18	the system worked as it was supposed to and that
19	everybody was able to participate and got the
20	message.
21	Now the cool thing about where the
22	system is evolving is that what they were testing

this year are the alerts being received from the 1 2 FEMA alert aggregator. And by receiving the alerts that way they're able to receive very rich 3 4 IP-based data that is put together in something 5 called the Common Alerting Protocol. And what that enables folks to do, for example, is to 6 receive alerts in multiple languages. 7 So this alert was sent out in English 8 9 and Spanish. It was also sent out with an extra text file so that the audio and the text would 10 match up so that deaf people would get exactly 11

12 the same information reading it as the hearing 13 people would from listening to it.

So we're advancing this system to take advantage of IP-based technologies. And to the extent that it was received by folks; and it was mixed as to how it was received, and that has to do with technical issues and the distribution architecture, it was very successful. So that worked out quite well.

21 One of the things that the FCC has 22 also done in the last year is added

functionalities to the system. And the most 1 2 recent one of those is what's called Blue Alerts. And there's a statute called the Blue Alert Act 3 4 which requires the Justice Department to act as a 5 coordinator for the various states to come up with plans to inform the public in the case that 6 7 a law enforcement officer is either killed in the 8 line of duty, injured in the line of duty or 9 whose life is threatened or who has been kidnapped in the line of duty where the suspect 10 11 is identifiable. And of course there's a lot of 12 internal work in between law enforcement entities 13 that goes on with Blue Alerts, but also there's a 14 public element.

And so if you're going to have a 15 16 public element to Blue Alerts, how do you do it 17 and how do you set it up and how does it work in 18 a way that's effective for the public and gets 19 the message across without inundating people with 20 alerts where the officer might be necessarily in 21 danger? That's where we came in and issued a 22 Notice of Proposed Rulemaking to develop a new

and specific event code for Blue Alerts, just as 1 2 you would have for tornados, just as you would have for a missing child so that we would have 3 one code that could then be applied consistently 4 throughout the country, backed up by a certain 5 set of quidelines that would determine the manner 6 7 in which local enforcement would issue the alert. And so the Commission adopted this new 8

9 code on December 14th, 2017. It's got two years of effective -- it's going to be effective in two 10 In the meanwhile we continue to work with 11 years. 12 the Department of Justice, with their Community 13 Office of Policing Services, who are the Blue 14 Alert coordinator, to work with them and to work with the states to get this system up and running 15 16 in an effective fashion.

17 The other system that we have is our 18 Wireless Emergency Alerts, and Wireless Emergency 19 Alerts -- we've probably all gotten them if 20 there's a thunder storm coming or whatever and 21 your phone vibrates and makes this terrific noise 22 and then you see this text on this. Now that is

-- again, this is Wireless Emergency Alerts or WEA, which goes back to the WARN Act in 2006, but it's something that has been up and running since 2012. And what the Commission did in September of 2016 was adopted an order to strengthen it and make it more effective.

So for example, when the Blue Alerts 7 8 launched -- not Blue Alerts, when the Wireless 9 Emergency Alerts launched, the amount of text that could be carried in one was limited to 90 10 11 characters, which you really can't say a lot with 12 90 characters. So the Commission adopted rules 13 to increase the maximum length of WEA messages from 90 to 360 characters for 4G LTE and future 14 It added new functionalities to the 15 networks. 16 actual message so that for example if you have an 17 AMBER Alert, you could also have a URL imbedded 18 in the alert to allow you to click onto the 19 picture of the missing child. So adding URLs. 20 Adding callback numbers, URLs that would bring 21 you to a callback number are added in.

Initially for technical reasons alerts

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were limited -- could be no greater than a 1 2 county. Well, Montgomery County, Maryland is big enough, but you go out west and you've got 3 4 counties that are bigger than some eastern states 5 and you really don't want to alert the folks about the weather emergency in the northern part 6 7 of the county in the southern part of the county 8 where it's irrelevant. It takes away from the 9 efficiency and the effectiveness and the impact of the alerts. 10

11 So what the Commission did was narrow 12 it down to a polygon, okay, that would be the 13 actual area affected as the best approximates to 14 the polygon. Now this is going back into 2016. What the Commission did more recently in January 15 16 was narrow this even further so that alerts that 17 will be going out will be limited to the actual 18 polygon and cannot exceed the polygon more than 19 one-tenth of a mile. So it's really, really 20 tight.

21 And one of the ways that the 22 Commission has suggested this might be done would

be to augment the information that is delivered by the National Weather Service, for example, with intelligence that might be existing in the handset that would be able to know where it is and when it's within the area of danger to give the alert then.

So we hope to be able to have a very,
very tight, very accurate wireless emergency
messages that give sufficient information to
inform the public, given them access to other
data through URLs, and only affect those folks
who are really in the danger zone.

Other things that the Commission has 13 done is create a new class of alert called Public 14 15 Safety Messages. The way the system is broken 16 out right now is that you have the Presidential 17 Alert, which you cannot opt out from. If that 18 ever comes across, you got to listen to it. 19 AMBER Alerts. Okay. And what are called 20 Imminent Threat Alerts.

Imminent Threat Alerts are alerts that
are serious, are life and property-threatening,

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are very close to you and are going to happen within a very quick period of time. So for example, a tornado would be an imminent threat whereas a hurricane, that might be a serious hurricane that's three days out, might not be an imminent threat, however, storm surge could be an imminent threat.

8 So it puts a lot on the alert initiator to 9 sculpt these correctly, but we find that in the case of let's say a tornado alert, and there's 10 the tornado, you might want to do follow up to 11 12 it. Is -- are there -- do you need to inform 13 people about evacuation centers? Do you need to 14 give them boil water alerts? Do you need to give them information that is sufficiently related to 15 16 the imminent threat but is not in and of itself 17 imminent?

So what the Commission did was adopt a new category called Public Safety Messages that convey this essential recommended action that can save lives and property that would be associated with an imminent threat.

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1	The Commission has also introduced and
2	requiring Spanish language WEA messages. And
3	most recently has adopted other rules that
4	require that the information stay on the phone.
5	So for example, you could get this and you get it
6	while you're driving. You go holy smoke and you
7	go to pull over and then you go to look at it
8	again and it's gone. Right now what now is is
9	that the Commission requires that alert messages
10	remain in a consumer-accessible format on the
11	wireless device for 24 hours after receipt or if
12	the consumer chooses to delete the message.
13	And at this point the extended
14	character length is 2019. Spanish is May 2019.
15	The URLs are in place now. Spanish language
16	would be May 2019, as well as the more narrow
17	geographic message codes.
18	So that kind of covers it for
19	alerting. Happy to answer any if there are
20	any questions.
21	CHAIR BARTHOLME: Okay. Does anybody
22	have any questions?

1	(No audible response)	
2	CHAIR BARTHOLME: I had one actually.	
3	The situation in Hawaii, what category did that	
4	alert fall into?	
5	MR. COOKE: You know, I really can't	
6	the Commission announced results of an initial	
7	investigation at a prior meeting and this	
8	investigation is ongoing, so I really can't	
9	comment.	
10	CHAIR BARTHOLME: Okay. All right.	
11	MR. COOKE: Thanks, everybody.	
12	CHAIR BARTHOLME: All right. We have	
13	a little bit of an agenda change. I understand	
14	that Roberto was actually deployed to Puerto Rico	
15	over the weekend and will be unable to join us	
16	here in person, so David Furth, who is the Deputy	
17	Bureau Chief for Public Safety and Homeland	
18	Security, will be joining us to cover both,	
19	information about FirstNet and information about	
20	Next Gen 911. And we'll let you do you want	
21	to if you want to run through all of your	
22	stuff and then do questions at the end, or if you	

1	want to sort of keep it segmented and break it
2	up, happy to accommodate either way.
3	MR. FURTH: I think I'm happy to break
4	it up. I'm really open to whatever it is that
5	would work better for the group. And since we
6	had two segments planned, there isn't there is
7	a relationship between first responder
8	communications and 911, which we will certainly
9	talk about, but maybe just for simplicity sake to
10	put this into a bit more bite-sized chunks let's
11	start with and hang on, my phone is ringing.
12	No, that's a robocall.
13	(Laughter.)
14	CHAIR BARTHOLME: That's later on the
15	agenda actually.
16	MR. FURTH: So, no, when my phone says
17	it's potential spam, I generally take the hint.
18	So let me start with a very basic
19	overview. I know that the CAC was interested in
20	FirstNet and I will certainly be happy to talk
21	about FirstNet, but it struck me that maybe in
22	order to put FirstNet in perspective it would be

helpful to go back a little bit to provide a 1 2 little bit more of an overview of first responder communications. 3 And I happened to be watching upstairs 4 5 when Chris Anderson was here and I think you asked a question about interoperability --6 CHAIR BARTHOLME: 7 Right. MR. FURTH: -- and which I would like 8 9 to get to, because it's an extremely important 10 issue. Your question was spot on. And there is a lot of history about how we got to where we are 11 12 and I think that there is both a glass-half-full 13 and a glass-half-empty aspect to the issue of 14 interoperability. Why don't we have it everywhere? And where we do have it how is it 15 16 that we've gotten there and in the places where 17 we don't why is that? 18 So let me just step back a little bit 19 and talk about the FCC's specific responsibility 20 when it comes to first responder communications 21 as part of that larger landscape. 22 The Commission is responsible for

licensing of spectrum for all types of services including television and cell phones and all of the things that everybody in the wireless age is very familiar with.

We also license public safety radio 5 spectrum, which is spectrum that's been 6 7 designated for use by public safety. And this is 8 something that actually started in the '30s and 9 '40s when the Commission was first formed and when law enforcement particularly started to put 10 11 radios in their cars. The Commission began to 12 license those systems. And so basically any system that is used by a local police department, 13 14 fire department, emergency medical response is licensed by the Commission. 15

And there are specific bands in the spectrum that are dedicated for public safety use, some of which are quite old. We started licensing spectrum again back in the '30s and '40s in the VHF and UHF bands that was for some of the first of those radio systems. And these are essentially voice dispatch radio systems

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where typically you'll have a command center, a 1 2 dispatch center at the headquarters of the police department or the fire department and they will 3 be interacting on the radio with people, with 4 5 first responders in their cars or with portables that they're carrying on their person. 6 And that 7 technology goes back a long way, but it's evolved a great deal since the '30s and '40s. 8 9 So all of those systems are licensed 10 by the Commission. They are on multiple bands.

As I said, the oldest systems which we started to license in the '30s and '40s were largely on VHF and UHF spectrum. Then starting in the '80s and '90s we opened up newer bands in the 700 and 800 megahertz range for additional capacity for public safety. And most of those systems have been licensed more recently.

So one of the things that affects interoperability is simply what band is a given police department or fire department using when -- for their communications, because in fact the bands differ. And I would say generalizing a

little bit we have thousands of licensees around 1 2 the country. Many of them are still on those UHF and VHF bands. Those are particularly popular in 3 rural areas because typically UHF and VHF has 4 better propagation over distance. 5 And the 700 and 800-megahertz systems 6 7 that have been deployed more recently tend, although not always, to be in more urban areas, 8 suburban areas. 9 There are statewide systems. 10 There has been over time a trend towards, in the evolution of the technology, from what was 11 12 originally analog technology to digital 13 technology. 14 There's also been the development in the standards and in the equipment that's 15 16 available a much more enhanced ability to have 17 interoperability as a feature in your radio. So 18 in fact, most radios that are deployed today are 19 designed for interoperability, support 20 interoperable communications. The technology is 21 there to do it, but often the issue of whether 22 you have interoperability depends on whether

those local and state agencies choose to do it. And that is still essentially a state and a local decision.

4 There's been a lot of progress on 5 interoperability over certainly the time that I've been at the Commission. And most states now 6 through a program that's funded by DHS have 7 8 statewide interoperability coordinators whose 9 responsibility is to try to bring the systems that are within the state into an interoperable 10 So interoperability has progressed a 11 frame. 12 great deal, but it's still not ubiquitous and 13 uniform.

14 And I don't know -- I know you had 15 asked about Parkland. I can't comment on the 16 specifics of Parkland. I don't know what exactly what the situation was there. But there are 17 18 certainly instances where we see that in incident 19 response interoperability is -- or lack of 20 interoperability is still an issue, and that is 21 an ongoing challenge for us at the federal level, and I think also for state and local government. 22

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1	And there are areas where in fact a
2	lot of work has been done on interoperability,
3	just as a sort of historical side note. If you
4	look at 9/11, all of the issues that most people
5	talk about with respect to interoperability came
6	out of New York, because it was about the New
7	York Police Department and the New York Fire
8	Department and who could communicate with whom in
9	the Towers.
10	Interestingly you will not see a
11	similar discussion about a lack of
12	interoperability in the Metropolitan Capital
13	Region on 9/11, and historically the reason for
14	that is that back in 1981 when we had the Air
15	Florida crash here in the D.C. area that was the
16	event that focused this region on
17	interoperability, because that was the event that
18	revealed the seams in all of the local systems
19	here in the area and we had lots of agencies
20	converging on that incident not able to
21	communicate with one another.
22	And that began a long evolution within

the National Capital Region to build an
 interoperable framework in terms of the
 technology, in terms of the operations, in terms
 of the governance, in terms of training. And all
 of those things have resulted in fairly robust
 interoperability here in the National Capital
 Region.

And in fact DHS does periodically a 8 9 kind of interoperability score card where they --I don't know that they've done one in the last 10 several years, but I know they did one a few 11 12 years back where they actually graded 13 jurisdictions on how far they had come in terms 14 of interoperability. And again, there's still a great deal of variation in the way that different 15 16 jurisdictions respond to that challenge.

17 So for -- really I think for 18 consumers, for citizens you need to look at how 19 it is working or not working in your community. 20 The Commission can do a great deal to make 21 interoperability possible, to ensure that the 22 spectrum planning and the technology will support

1	interoperability, but the Commission doesn't have
2	the ability to make it happen at the governance
3	and operational level where those are state and
4	local government decisions. And that's the
5	that's essentially the lay of the land.
6	Now let me then add FirstNet to the
7	equation, because FirstNet is a bit of a game
8	changer when we talk about interoperability. One
9	of the key findings, as I think many of you know,
10	out of the 9/11 Commission was that
11	interoperability remained a huge issue and
12	something that still needed to be tackled, not
13	enough progress had been made.
14	And short-cutting a lot of history,
15	one of the things that came out of that was the
16	legislation that created FirstNet. And the
17	vision of FirstNet was to create a nationwide
18	public safety broadband network that would be
19	fully interoperable and it would be governed at
20	the national level.
21	And so that legislation, which was
22	passed in 2012, did a number of things: It

required the Commission to allocate spectrum that would be licensed to FirstNet. It set up the governance structure of FirstNet. It set up a funding mechanism for FirstNet which was to take funds from FCC auctions that would be dedicated to the build-out of this network.

7 And the vision was let's have a state-8 of-the-art broadband network that serves public 9 safety and that's fully interoperable everywhere 10 in the country, which was not something that this 11 country, or really any country had ever done 12 before. So it was a very, very dynamic way of 13 addressing the interoperability challenge.

14 A couple of things to note about One is that the vision was a broadband 15 FirstNet: 16 network that would primarily, at least in its 17 first iteration, support data, would not 18 necessarily support voice. If you talk to first 19 responders and if you look at the equipment that 20 they have, I mean, typically now most of them still are relying primarily on voice 21 communications in their vehicles with their --22

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the radios they carry with them. And often they will also have their own iPhone or Android, their own smartphone, that they carry as a second device, because those radio networks that have been licensed for decades, they're voice networks. They're not data networks.

7 And so one of the visions of FirstNet 8 was let's create the opportunity to afford public 9 safety, the ability to also access data, because 10 there are all kinds of situations where as first 11 responders are coming to a scene data as well as 12 voice communications could be very important to 13 the response.

So that was the vision behind FirstNet 14 15 was to require it to use commercial broadband 16 technology. FirstNet is required under the 17 statute to use the same LTE technology that is 18 used by the major carriers. Anybody here with a 19 smartphone, you're probably -- if you're looking 20 at your data on your smartphone, you're probably 21 using LTE to do it. FirstNet is based on the 22 same platform.

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1	What is different about FirstNet is,
2	No. 1, it has dedicated spectrum that is licensed
3	to FirstNet. So they are not required, they are
4	not limited to operating on commercially-
5	allocated bands. That means that in an emergency
6	FirstNet can go to capacity that is dedicated to
7	public safety. And even if you have an emergency
8	where everybody gets on their cell phone,
9	everybody is loading up the system, there is
10	dedicated spectrum that FirstNet has access to
11	that is priority spectrum capacity for public
12	safety in that emergency. And that's again,
13	that's a real game changer from what we've had in
14	the past. So that's one aspect of what kind of
15	makes FirstNet unique.
16	Another is the way that we're not
17	seeing FirstNet roll out, because the concept was
18	developed in 2012 in the legislation. We are now

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at the point where FirstNet is actually beginning

They entered into a contract with AT&T that was a

competitive process with the -- in which vendors

to deploy and provide service to public safety.

were -- had the opportunity to bid for the
 FirstNet contract. AT&T was the winner in that
 process.

So FirstNet and AT&T are now partners and are building the network. Public safety will have access to AT&T's commercial spectrum, but will also have access to this dedicated band of spectrum that's allocated for public safety and specifically licensed to FirstNet.

There was in the legislation and 10 11 option for states if they wished to opt out of 12 FirstNet and to build their own networks, 13 provided that they were interoperable with 14 FirstNet. We opened a window that allowed any state if they chose to elect that option. 15 In 16 fact, no state did. So we now have and we now 17 know that FirstNet will be deploying and building 18 the network in every state and in all the territories. And that's happening now. 19 20 And I think that what will happen, 21 what the benefits of that will be for public

safety -- to some extent it remains to be seen

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because we're now at the point where the FirstNet 1 2 network is being deployed. And public safety is not required to use it. FirstNet is going to go 3 out and have to win public safety customers, and 4 5 they're in the process of doing that. But it provides an option for public safety that public 6 7 safety hasn't had before, which is access to a 8 broadband network that's fully interoperable 9 across the country and that provides capacity in emergencies to public safety regardless of how 10 congested the commercial networks are. 11 12 So it provides the potential for a

13 much improved response to emergencies. And 14 because it is being across the country based on 15 standards that have been articulated for 16 interoperability, it will be fully interoperable 17 across the country. And that will be a major 18 change in the environment for public safety.

So with that, let me stop for a second
and just ask if there are questions about
FirstNet communications, about interoperability,
about FirstNet that I can answer, and then we'll

switch over to 911.

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CHAIR BARTHOLME: Thaddeus?

3 MEMBER JOHNSON: Yes, in situations 4 where systems don't talk to each other is it more 5 of a situation or a problem of different hardware providers or technical standards? And I'm asking 6 7 because I'm thinking about sunk costs. If a city 8 or county or whatever puts \$200,000 into system A 9 and system B is better, like how many years are going to have to go by before they upgrade to 10 11 something if the problem is the provider or a 12 technical standard? 13 MR. FURTH: It's really -- it's really 14 going to vary. I think the one thing that's a 15 constant is that when agencies are making

16 decisions about what equipment to buy, about what 17 system to implement, they are making a long-term 18 decision about what -- the investment that

19 they're making.

20 And because typically when, let's say, 21 Washington, D.C. or Montgomery County or San 22 Francisco or Dallas, Texas, goes out and buys a

radio system that they are going to be using for their first responders, they are going to be -they should be looking at all of those issues because that's a system that's probably going to be used for a number of years, possibly more than a decade.

7 And so it's -- it's important for 8 jurisdictions to ask those questions. It is --9 and the answers to the questions and the choices 10 they make may have consequences. As I said, in 11 general, the technology at this point that is 12 available when a jurisdiction is going out and 13 looking at what to -- what to acquire, what to 14 purchase, supports interoperability.

15 It should not be an issue of whether 16 this -- there is a standard that supports 17 interoperability. But there are still issues 18 that you have to think about in terms of the cost 19 of the system, the functionality of the system, 20 and who within that community are you going to be 21 interoperating with.

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And that's a matter of planning, of

deciding in advance that not only do we have a 1 2 system that's capable of interoperability, but we're going to work with our neighbors to program 3 -- program that into the radio. So it starts 4 5 with as simple a thing as deciding what channels are we going to all use if we are in a situation 6 where we're doing joint response to an incident. 7 8 That's -- again, to take National 9 Capital region as an example, that is something 10 that they spent an enormous amount of time on 11 planning, so that -- that -- because you have 12 many incidents here that are going to have 13 multiple jurisdictions converging on a scene. 14 And you have to have planned in advance how 15 you're going to use the technology to support

What channels are people going to use if they're from different jurisdictions? What channels are you going to use to speak to the people within your own organization? How is that all going to be managed? The technology will support any way you want to do it, but you have

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interoperability.

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to decide how to do it.

2	And then, beyond that, there is the
3	question of of planning and of training. If
4	you look at the interoperability criteria that
5	DHS put out, they put out something called the
6	Interoperability Continuum, which is kind of a
7	five-step analysis of how do you get to full
8	interoperability.
9	Only one of those five steps has
10	anything to do with technology. The other four
11	have to do with operations and governance and
12	training. And so I think that tells you
13	something about how complicated this decision is.
14	It's very important. It's critical. But it's
15	not just a question of, what radio do I buy?
16	MEMBER HERRERA: This is Mitsu Herrera
17	on the telephone. Can I chime in on this?
18	CHAIR BARTHOLME: Sure.
19	MEMBER HERRERA: So it is true that in
20	particularly in the National Capital Region,
21	that we have been working on inoperability since
22	1991 when there was a there was a plane crash

in the Potomac River, and that's what first
 brought the problem to light.

So I think that there is -- there has been a lot of coordination. It is multi-state, multi-jurisdictional, federal, state, and local. But what I'm curious about is, almost all of that work has been done by the local governments, in partnership with some of the state, to have that happen.

But there hasn't, as far as I know, been that much technical expertise provided by the various federal agencies, either by FCC or Homeland Security. The drivers have very much been the local level.

And in some places where you'll have places like, say, a Kansas City where you have a city that sits in two states, you have a lot of people who are used to working together, and I think that the interoperability is improved. But in other places, and somebody had mentioned previously the recent shooting in

Florida, where you have agencies in which they

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just haven't had to work together across those 1 2 different jurisdictions, does the FCC -- are you doing anything to either have a checklist or a 3 task list, or do you have -- is there some kind 4 5 of identification of where the inoperability is working well? Are there guidelines? 6 What is 7 happening in places where you are not at the 8 center of the nation's capital with, you know, 20 9 or 30 years of experience doing this? 10 MR. FURTH: Well, let me -- let me talk about what the FCC does and then also a 11 12 little bit more broadly about what resources are available at the federal level, because a lot of 13 14 this actually takes place outside the Commission but with agencies that we coordinate with very 15 16 closely.

When we -- when we allocate spectrum and license spectrum, we in some instances will require the use of equipment that incorporates standards for interoperability. But we don't go out and monitor. We don't have the resources to go out and monitor what jurisdictions actually do

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1	with the technology, with the radio systems that
2	they operate.
3	Our primary concern is to make sure
4	that they're not interfering with one another,
5	that they're complying with our technical rules.
6	Now, having said that, there are a lot
7	of resources that are available at the federal
8	level. In fact, within DHS, there are several
9	parts of DHS, their Office of Emergency
10	Communications, that provide technical
11	assistance, that provide grant funding, on these
12	very issues.
13	So there is actually a fair amount of
14	federal technical assistance that is available to
15	jurisdictions that want to address
16	interoperability issues. But the underlying fat
17	is that most first response, most emergency
18	response in the U.S. is provided at the state and
19	local level.
20	And there are a lot of advantages to
21	that in terms of how effective that response is
22	for those communities and for people in those

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communities. What that also means, though, is it's very difficult to impose a top-down solution when it comes to interoperability.

It really has to be developed from the 4 5 bottom up, and part of that is for the reason that you point out, which is that the solutions 6 7 are going to differ in every community. It's 8 going to be a question of thinking, what kinds of 9 incidents are we going to be needing to respond Both on a regular basis and in an extreme 10 to? situation. And what are the other agencies that 11 12 are going to be coming on the scene in an incident that is one that crosses jurisdictional 13 14 boundaries, for example.

15 That kind of planning really has to 16 happen at the state -- at the state and at the 17 local level because that's where the response 18 agencies are. And they are in the best position 19 to figure out what it is that's going to be 20 responsive to those community needs. 21 So it is frustrating because not

everybody engages that effort, and there will

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always be incidents where you discover perhaps a
 scene that you didn't anticipate. It may be that
 interoperability works well for 99 percent of the
 incidents that you respond to, but then there is
 that one percent where something happens that you
 realize you haven't adequately prepared for.
 And that's the challenge I think for

8 everybody at all levels it to -- to anticipate 9 what the interoperability requirements are going 10 to be, who is going to need to interoperate with 11 one another.

I can give you an example in terms of an issue that the Commission looked at a few years ago, which was making public safety channels available to law enforcement that operates on railroads.

17 If you think about it, think about a 18 rail accident. It could happen anywhere on the 19 rail line, so it could -- it could happen, you 20 know, anywhere across thousands of miles of 21 railroad infrastructure. And there may -- if 22 there are -- if there is law enforcement, if you

have railroad police on the train, are they going to be able to interoperate with whoever is in the local area in order to be able to respond to that disaster. And it could be anywhere.

5 So what the Commission did was to 6 authorize railroad police to use the same 7 interoperability frequencies that local -- local 8 public safety agencies use. So at least they all 9 have access to the same channels, because until 10 we made that rule change they couldn't even use 11 the same channels.

12 Once we've done that, then the 13 challenge is, okay, you have the ability to use 14 the same channels, the railroad police do, along with state and local law enforcement. 15 Then it's 16 a matter of how do you plan for that incident? 17 And the likelihood of an incident happening in 18 any one jurisdiction may be very small, but it's 19 something you have to anticipate if you have 20 railroads coming through your jurisdiction. So the Commission can set the table 21 22 for an interoperability solution, and we can

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encourage and advise people to plan for those kinds of incidents. But, ultimately, it's going to be up to the responsible agencies to come up with a plan, so that if that happens they will be prepared.

6 CHAIR BARTHOLME: Thank you. I think
7 we're ready to segue to --

MR. FURTH: Okay.

CHAIR BARTHOLME: -- next gen 911.

10 MR. FURTH: Okay. So we're going to switch now to 911, and I actually think about 911 11 12 -- what we've been talking about and what we're 13 about to talk about as parts of a continuum. 14 Because if you think about an incident, often that incident will start with somebody making a 15 16 911 call or maybe multiple people making 911 17 calls.

So something happens, a traffic
accident, a fire, a medical emergency, and you
know that at the end of this process you want
first responders there on the scene to respond to
that emergency. And we've talked about the first

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responder side of it. How do they communicate 1 2 with one another in order to get to that emergency and provide the proper response? 3 4 But now we talk about the front end, 5 which is how does the public communicate with emergency responders in the first place in order 6 7 to get help? And the 911 system is our answer to 8 that question. 9 Some of you may have seen some press coverage a couple of weeks ago because 911 10 celebrate its 50th birthday, the 50th anniversary 11 12 of the first 911 call, which happened in Alabama 13 in February of 1968, was just a couple of weeks 14 And so the 911 system has been around for a ago. 15 long time. And I will talk a little bit about 16 17 next generation 911, but before doing that, 18 again, I think it's worth stepping back to think 19 about how 911 has evolved. So the original 911 20 system, when it was -- when 911 was first 21 identified as an emergency number in the late 22 '60s was essentially a system that was built to

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use landline telephones.

2	At that point, cell phones didn't
3	exist yet. The internet didn't exist. All of
4	the technology that we're now used to did not
5	exist. So 911 was originally developed basically
6	to work with landline telephones.
7	And for the first couple of decades,
8	that's essentially what it did. And the concept
9	was you dial 911 on any landline telephone in the
10	country, and it will get you to a 911 call
11	center, what we call a public safety answering
12	point, or PSAP, in your area, and they will then
13	be responsible for dispatching help to where you
14	are.
15	As the technology that we all use to
16	communicate has evolved, the 911 system has had
17	to keep up. And that's that has been one of
18	the challenges because, again, 911, like what
19	we've been talking about, like what we've when
20	we talk about public safety radio systems, 911 is
21	a service that is provided at the local level.
22	We have somewhere north of 6,000 911

call centers in this country. Most of them are 1 2 run out of county/city government, often out of a police station. Most of them are very small. 3 4 Some are essentially a couple of telephone stations in a police station. 5 Obviously, there are some 911 call 6 centers that are very large. 7 If you go to the 8 D.C. 911 call center across the Anacostia River, 9 it's a marvelous state-of-the-art call center, takes about 1.3 million calls a year, and is a 10 really tremendous facility. And in other urban 11 12 areas, you will see that. But, again, 911 is 13 something that is provided at the local level. 14 The Commission's role in 911 has, from a regulatory point of view, been not to regulate 15 16 those state and local governments that provide 17 911, that answer the calls, but to regulate the 18 way in which commercial carriers that we all use 19 to contact 911, to make sure that they support 20 911, so that if -- if I am in some kind of 21 distress, or there is an emergency that I need to contact 911, I am going to be using a commercial 22

-- I am going to be using a commercial service to 1 2 dial that number. Actually, I'm not dialing it anymore, even though we still talk about dialing 3 4 911. 5 So as I said, the 911 system started really as a landline system. 6 Then, as cell 7 phones came to the fore and became ubiquitous, 8 911 had to adapt to be able to support wireless 9 911 calling. And a lot of the regulatory activity that the Commission has engaged in has 10 11 to do with how to ensure that the carriers, 12 landline carriers, and then wireless and VoIP 13 carriers, support 911. 14 So that if you make a 911 call, it will get through to a call center that can 15 16 provide -- that can provide help. But that's 17 meant -- technologically changing the system 18 through all of these different phases.

And where we are now with next -- what we call next generation 911, and if you Google it you'll see a whole lot of different things. And I'm going to oversimplify a little bit, but next

generation 911 really -- there are kind of two 1 2 basic components to it. One is that, as communications technology has moved from what we 3 call circuit switch to kind of telephony 4 technology to IP, internet protocol-based 5 technology, it's the technology that is the 6 7 foundation for the internet and for most of the 8 commercial communications that we're all engaged 9 in all the time.

As the communications platforms have become IP-based, next generation 911 is in part about ensuring that the 911 system also becomes an IP-based system, and makes that migration from the kind of legacy telephone technology world that it started in to an IP-based platform.

And there are a lot of different pieces to that that will make -- that ultimately should make no difference to what happens if you make a 911 call. If you make a 911 call, do you care whether it's going over a landline circuit switch system or going over an IP-based system? No. What you care about is that somebody answers

the phone, they know where you are, and they can get help you to.

3	And so the vision of doing it over IP
4	is, in a lot of ways, something that consumers
5	should never have to see because it should work
6	seamlessly the way 911 always has worked. But
7	the challenge of actually accomplishing that
8	upgrade is an enormous challenge. It means new
9	technology, it means new and new technology
10	both on the carrier side and on the on the
11	call center side.
12	And it also means overcoming the
13	funding challenge. How do you pay for it? So
14	there are a whole host of issues that are
15	associated with how do we how do we make that
16	conversion from telephony to IP-based? That's
17	one aspect of next generation 911.
18	The other is actually something that
19	consumers will see, which is, how do you
20	communicate with 911? The concept of calling 911
21	is still essentially you can make a voice call.
22	Most of us, and certainly I mean, I've got

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kids in their twenties. They are texting. 1 2 They're doing all kinds of things. Often, the last form of communication they are using is 3 voice communications. 4 5 And so the other aspect of next 6 generation 911 is expanding the 911 system so that it will -- it will continue to support 7 8 voice, voice continues to be very important, but 9 so that it will also be able to support other ways in which people communicate, by text, by 10 being able to send photos and video and data. 11 Right now, in most parts of the 12 13 country, if you call 911, you cannot do something 14 as simple as send a photo to the 911 call center. And the Commission, about four years ago, adopted 15 16 rules that required carriers to support text to 17 911, so that you would -- if you had a situation 18 where, for example -- it could be a couple of 19 things. 20 One would be let's say you're someone 21 who has a hearing or a speech disability, so making a voice call is difficult. There is very 22

old, just kind of -- there's old technology called TTY that has been out there for a long time that was designed in the '70s and '80s to support that. But now we are in a world where text is ubiquitous.

6 So the Commission said four years ago, 7 let's have carriers that offer text to their 8 customers support the capability to use text to 9 contact 911, which will help the disabilities 10 community. It can also help in certain 11 situations where maybe a voice call is either not 12 possible or could be dangerous to the caller.

13 If you think about a domestic abuse 14 situation, if you think about an active shooter 15 situation, there are a number of instances where 16 it might be preferable from the caller's point of 17 view to text rather than to call.

18 The Commission mandated that for the 19 carriers. We did not mandate that for the call 20 centers because we don't have jurisdiction to do 21 that. They are -- they are local and state-22 governed entities. So that has been an

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evolutionary process of encouraging communities 1 2 around the country to adopt text to 911, to increase the functionality of their 911 systems, 3 4 so they will support text as well as voice. 5 We're now at a point where about a 6 third of the counties in the country support text 7 to 911. There are more that are doing it. There 8 was -- the District of Columbia went live with 9 text to 911 last year. There was an announcement I believe last week that the State of Maryland 10 11 will be going live with text to 911 within a few 12 months. 13 So it's gradually spreading around the 14 country. But, again, that upgrade -- and upgrading to text to 911 does not even require 15 16 full upgrading to next generation 911. That's 17 still something that has to happen in all of 18 those 6,000 call centers around the country. So 19 it's not going to happen overnight. 20 Bu at the end of the process, what we 21 envision with next generation 911 is that it's a 22 system that will support all of these

functionalities. It will enable anybody who needs to call to still be able to communicate by voice with the call taker, but also potentially to send important information like a photo or a video of an accident scene, or to be able to text if voice communication is not called for in that situation.

8 So that's also part of the evolution 9 to next generation 911. It requires a lot of 10 different -- a lot of action at different levels 11 of government because there is no one agency, 12 including the FCC, that has jurisdiction control 13 over the entire system, the entire ecosystem.

But it's an extremely important endeavor that we are very focused on doing whatever we can to help to move that migration forward.

So I think with that, again, rather than talk more, let me just take questions, if people have questions about 911, next generation or otherwise, or specific questions about some of the Commission's initiatives.

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CHAIR BARTHOLME: Anyone with
questions in the room or on the phone?
So I know that one thing that we all
see on our phone bills is a fee for 911 services.
MR. FURTH: Yes.
CHAIR BARTHOLME: And Commissioner
O'Rielly recently put out a statement asking
local municipalities to be a little more
transparent with that. Can you maybe talk about
the
MR. FURTH: Sure.
CHAIR BARTHOLME: Commission's role
in that and
MR. FURTH: Sure. Well, Commissioner
O'Rielly was commenting on something that we
reported, because the Commission, and in fact our
bureau, is responsible every year for submitting
a report to Congress on 911 fees. This is
something that Congress required us to do in a
law that they passed about 10 years ago.
And to step back, the fees that you
see on your phone bill, whether it's your

landline bill or your wireless bill, those are
 set by the state. And in some instances, there
 may be fees that are also set at the local
 government level, but every state has the ability
 to decide if they're going to require a fee or a
 charge to go on consumers' bills to support 911.
 And most states do that.

8 What Congress asked the FCC to do was 9 to report, to go out every year, gather information from the states about their fee 10 11 collections and their fee expenditures. And so 12 that's what we do every year, and the report 13 comes out. We send it to Congress at the end of 14 the year, and generally publish it in January. 15 And so we published our most recent report a few 16 weeks ago.

17 One of the reasons that Congress 18 directed the FCC to issue this report was out of 19 a concern with fee diversion, which is some 20 states will collect that 911 fee, and then will 21 spend it on other things, not on 911. And that 22 was an issue that concerned Congress, which was

one of the key reasons that they directed the
 Commission to issue a report.

So one of the things that we do in 3 4 that report every year is we identify which 5 states are spending their money on something other than 911. And although it's a minority of 6 7 states, there is -- I think this year it was six 8 or seven states -- I think six, that diverted 9 fees, and it's in our report. And that's what Commissioner O'Rielly 10 11 was sending a letter to those states about. 12 Essentially, he is saying to them that he wants -

- and I think he actually sent it to both the
states that were identified as diverting and also
to states that had failed to submit a report to
us.

We go out and we collect data. We try to collect data from all 50 states, but we don't always get data from all 50 states. There are usually a handful of states that don't report back to us. So Commissioner O'Rielly has sent a letter to both the non-reporting states and the

states that have been identified as diverting
 funds, in an effort to try to combat this
 phenomenon of fee diversion.

4 So we're going to continue to issue 5 this report every year. We'll do another one 6 next year. And it's, therefore, an important 7 source of information. And I think it's 8 something that this Committee -- I would 9 certainly recommend it to you. We'll provide a 10 link to the report and to past reports.

In addition to information about fee 11 12 diversion, it provides a lot of other useful 13 information about how money is being spent in 14 every state. There is an aggregate of about 2.5, \$2.6 billion collected in 911 fees across the 15 16 country. The amounts vary from state to state, 17 and the way that the money is spent varies from 18 state to state.

But there is a lot of useful information that you can get out of that report about your individual states, and also what trends are nationally.

1	CHAIR BARTHOLME: Thank you for
2	joining us today. We appreciate having you.
3	MR. FURTH: Well, thank you thank
4	you for inviting me.
5	CHAIR BARTHOLME: So next on the
6	agenda we have a break for lunch. But before we
7	do that, I have a couple of things. Larry, are
8	you still on the phone? I wanted to give you a
9	chance to mention the NAB event that was recently
10	convened around disaster response? So maybe I
11	just called Larry out for jumping off the phone
12	for lunch early, but
13	(Laughter.)
14	CHAIR BARTHOLME: I will plug their
15	event. Earlier this month they had an event
16	called Eye of the Storm, which focused on the way
17	that broadcasters, the FCC, FEMA, and other
18	agencies, coordinate efforts to cover disasters
19	that are occurring, weather events, and
20	otherwise, and also respond to those.
21	There is a video link for that event
22	that we will send around with the rest of the

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meeting packets. And if you're interested, you 1 2 can -- you can take some time and watch that and learn a little bit more about sort of the day to 3 4 day of disaster response and planning. 5 We did have a couple people pop in after we did intros this morning, and maybe a 6 7 couple of people join the call. So I just wanted to really quickly let those of you who didn't get 8 9 a chance to introduce yourselves at the beginning 10 of the day, maybe take some time to do that now? We'll start with Alan. 11 12 MEMBER BUTLER: My name is Alan 13 Butler. I'm from the Electronic Privacy 14 Information Center based here in D.C. 15 CHAIR BARTHOLME: Okay. Great. 16 Thanks. Katie? 17 MEMBER MCAULIFFE: Katie McAuliffe, 18 Americans for Tax Reform and Digital Liberty. 19 CHAIR BARTHOLME: Okay. I think --20 MEMBER ALKEBSI: Good morning. This 21 is Zainab. Oh, sorry. You want to go first? I'm Zainab Alkebsi, National Association of the 22

1 Deaf. 2 CHAIR BARTHOLME: Thanks. MEMBER OCHILLO: My name is Francella 3 Ochillo from the National Hispanic Media 4 5 Coalition. I introduced myself this morning on the phone. 6 CHAIR BARTHOLME: 7 Yes. Exactly. 8 MEMBER OCHILLO: Thanks. 9 CHAIR BARTHOLME: Good to put a face with the name. Anybody else on the call that 10 11 joined? 12 MEMBER MAHONEY: Hi. This is Maureen 13 Mahoney from Consumers Union. 14 CHAIR BARTHOLME: Hey, Maureen. 15 So quick reminder, at 1:00 today, we 16 are going to be considering a recommendation. So 17 that will be a vote, and I'm hopeful that as many 18 of you as possible can stick around for that 19 portion of the day. We will need a quorum to get 20 that passed, so we look forward to your 21 participation there. 22 And we will take a break for lunch and

be back here at 12:30. Thank you. 1 2 (Whereupon, the above-entitled matter recessed for lunch at 11:59 a.m., and went back 3 4 on the record at 12:33 p.m.) 5 CHAIR BARTHOLME: Welcome back Before we get rolling, I wanted to 6 everyone. 7 take another second to acknowledge NCTA and their 8 generous contribution of food for all of us 9 today. So --10 (Applause.) 11 CHAIR BARTHOLME: Next up, we're going to be joined by Evan Baranoff? 12 MR. BARANOFF: 13 Yes. 14 CHAIR BARTHOLME: He is an attorney 15 advisor for the Policy Division in the Media 16 Bureau, and we're going to learn a little bit 17 more about ATSC 3.0 and next steps. 18 MR. BARANOFF: That's right. He just 19 took my first slide. 20 (Laughter.) 21 MR. BARANOFF: Hi. Yes. I'm Evan, as you said, in the Media Bureau, Policy Division, 22

1 and that's right. 2 Let's see. Do you have a mic, or 3 MR. MARSHALL: 4 do you need me to slide this one over? MR. BARANOFF: Hello? 5 6 MR. MARSHALL: Oh, there you go. Now 7 you're --8 Is it working? MR. BARANOFF: Okay. 9 MR. MARSHALL: Yes. 10 MR. BARANOFF: Okay. So if --11 MR. MARSHALL: You pretty much have to 12 eat that mic. 13 MR. BARANOFF: Okay. All right. So 14 my slides will cover the report and order, the further notice briefly, and the post-adoption 15 16 issues, including next steps in the rulemaking. 17 In November of last year, the 18 Commission released a report and order and the 19 further notice of proposed rulemaking authorizing 20 broadcasters to use the next generation broadcast transmission standard called ATSC 3.0 on a 21 22 voluntary, market-driven basis, while they

continue to deliver current generation service,
 ATSC 1.0, to their viewers. It's voluntary and
 not a mandatory transition.

ATSC 3.0 has enormous potential. 4 It 5 is the first transmission standard to combine the advantages of broadcasting and the internet. 6 It enables enhanced and innovative new features to 7 8 consumers, such as ultra-high definition picture 9 and immersive audio, superior reception, advanced emergency alerting capable of waking up sleeping 10 11 devices, mobile viewing capabilities, more 12 localized programming, interactive educational 13 children's content, enhanced accessibility 14 features, and other enhanced features. Local simulcasting is the key to 15

15 notal simulcasting is the key to 16 protecting viewers during next generation TV 17 deployment. Next generation TV stations must 18 simulcast their primary video programming stream 19 of ATSC 3.0 channels in 1.0 format. Because ATSC 20 3.0 looks -- because ATSC 3.0 is not backwards 21 compatible with 1.0 equipment, the Commission 22 requires local simulcasting to ensure viewers

continue to receive their existing ATSC 1.0 service.

Local simulcasting will be 3 4 accomplished through voluntary partnerships 5 involving two or more stations in a market. Coverage and licensing requirements. 6 A 1.0 simulcast channel that is moving to a host 7 8 station must continue to cover its entire 9 community of license. Applications that do not result in a loss of more than five percent of the 10 11 existing population will receive expedited 12 processing within 15 business days. Other 13 applications will be processed in about 60 14 business days. 15 1.0 and 3.0 channels broadcast on a partner host station will be licensed as 16 17 temporary second channels of the originating 18 broadcaster. Next gen TV broadcasters will be 19 authorized for both its 1.0 and 3.0 channels 20 under its existing license. 21 The programming on the primary 1.0 22 simulcast stream must be substantially similar to

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1	that on the 3.0 primary stream. That is, it must
2	be the same except for features based on enhanced
3	capabilities of ATSC 3.0 technology.
4	Also, advertisements and promotions
5	are excluded. This requirement sunsets unless
6	the FCC acts to extend in five years.
7	The order afforded a blanket exemption
8	for LPTV and TV translators from the local
9	simulcasting requirement. Also, we will consider
10	waivers from aspects of the local simulcasting
11	requirement from full power and Class A stations
12	on a case-by-case basis.
13	MVPD carriage rights. Next generation
14	TV broadcasters' 1.0 simulcast channel will
15	retain mandatory carriage rights while the
16	Commission requires local simulcasting. And its
17	1.0/3.0 channel will not have mandatory carriage
18	rights.
19	1.0 channels moving to a temporary
20	host facility can retain mandatory carriage
21	rights, provided they continue to qualify for
22	such rights at the host facility location. These

1	channels cannot gain new carriage rights as a
2	result of their new location.
3	Voluntary carriage through
4	retransmission consent agreements is left to
5	marketplace negotiations. Consumer education
6	will be crucial to the successful deployment of
7	next generation TV service and simulcasting of
8	ATSC 1.0 service.
9	Consumers will need to be informed if
10	the stations they view will be changing channels,
11	and consumers will need to be encouraged to
12	rescan their receivers for new channel
13	assignments.
14	All stations that move their 1.0
15	channel due to 3.0 deployment must air daily
16	on-air consumer education, PSAs, or crawls,
17	beginning 30 days prior to the date that the
18	stations will stop broadcasting in 1.0 on their
19	current channels.
20	With respect to the ATSC 3.0 further
21	notice, the further notice raises three issues
22	related to local simulcasting whether more

guidance is necessary with respect to exemptions 1 2 and waivers of the local simulcasting requirement, whether to allow full power 3 4 broadcast stations to temporarily use vacant 5 channels to facilitate the transition to 3.0, and the further notice tentatively concludes that 6 local simulcasting should not change the 7 8 significantly viewed status of next generation TV 9 stations. Now turn to post-adoption issues. 10 11 Regarding the further notice, we are now within 12 the comment cycle of the further notice. 13 Comments were due February 20th. We have 14 received 19 comments as of last week. Replies to 15 the comments are due March 20th. 16 The report and order generally will 17 take effect March 5th, except for the 18 simulcasting rules which includes the licensing 19 process. So what does this mean for next 20 21 generation TV deployment? Well, the new

licensing rules require OMB approval, and we'll

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also need changes to our LMS database. 1 We expect 2 to have obtained the necessary approvals and completed the changes to our LMS database by the 3 4 beginning of next year. 5 To the extent parties show a need to begin ATSC 3.0 department -- deployment sooner 6 than that, we are contemplating using our special 7 8 temporary authority process to consider such 9 applications. We are aware of two market trials --10 11 the Pearl TV Group in the Phoenix market and the 12 Sinclair Group in the Dallas market. There have been informal discussions at the staff level 13 14 about these trials, but nothing yet has been 15 formally filed with the Commission. 16 I will now turn it over to some 17 questions, if there are any on the issue -- on 18 the issues or next steps. 19 CHAIR BARTHOLME: Real quickly. 20 MR. BARANOFF: Sure. 21 CHAIR BARTHOLME: What were the test 22 markets that you just mentioned?

	Τ0
1	MR. BARANOFF: So the Pearl Group in
2	Phoenix and in the Phoenix market, and
3	Sinclair in the Dallas market.
4	CHAIR BARTHOLME: And has anyone
5	approached the Commission about trying to
6	coordinate this with the existing repack efforts
7	related to the auction?
8	MR. BARANOFF: I'm not sure I entirely
9	know how to answer that question. They can file,
10	you know.
11	CHAIR BARTHOLME: Okay. But there
12	hasn't you haven't gotten no one has filed,
13	and there hasn't really been any
14	MR. BARANOFF: That's right. There is
15	just these two market trials that we're
16	expecting.
17	CHAIR BARTHOLME: Okay. And do you
18	know if any I know in Puerto Rico, for
19	instance, they sort of accelerated the time table
20	on certain retuning things as a result of the
21	hurricane and getting the towers back online.
22	I would also be curious to know if

anyone else that was recently affected in a 1 2 similar way is thinking of taking the opportunity, while a tower is powered off for 3 4 other reasons outside of everyone's control, to 5 consider. 6 MR. BARANOFF: No, not yet. I mean, 7 consumer devices aren't -- to receive 3.0 isn't 8 expected until 2020. So we're not sure how the 9 timing of the rollout is going to be. 10 CHAIR BARTHOLME: Sure. Any other questions? 11 Steve? 12 MEMBER POCIASK: That last point --13 MR. BARANOFF: Yes. 14 MEMBER POCIASK: -- that's sort of the reason why -- my question is: what exactly do 15 16 consumers need in terms of equipment? And how 17 does that work? I mean, are they using their --18 does that equipment connect to like WiFi in the 19 I mean, how does this work? home? 20 MR. BARANOFF: There's a variety of 21 equipment. I mean, first, the local simulcasting 22 will be key to consumers, so that they can

continue to receive television service with their
 existing equipment, with their existing
 televisions.

4 For any that want to take advantage of 5 this, they will have to obtain a receiver, a converter box of some sort, whether to the 6 7 television or perhaps a gateway device to the 8 internet to access the ATSC 3.0 signals. Does 9 that answer your question? 10 MEMBER POCIASK: Yes. 11 CHAIR BARTHOLME: Rick, any --12 MEMBER ELLROD: Rick Ellrod, Fairfax 13 County for NATOA. Following up on the same line, 14 is the five-year sunset based on the assumption that consumer equipment will have turned over by 15 16 that time and everyone will have 3.0 receivers? 17 MR. BARANOFF: The sunset is not to 18 the local simulcasting requirement, but just to 19 the substantially similar requirement. So in five years the Commission will just consider 20 21 whether the programming needs to be the same or whether it can be allowed to expire on these 22

terms.

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2	MEMBER OCHILLO: Hi. My name is
3	Francella Ochillo. I'm with the National
4	Hispanic Media Coalition, and I just had a
5	question a question about the Consumer
6	Education Fund legislation that is basically on
7	the floor right now.
8	I'm not entirely sure if you're the
9	right person to ask, but if you are
10	MR. BARANOFF: I'm not.
11	MEMBER OCHILLO: if you could give
12	me any oh, okay. Well, then that's
13	MR. BARANOFF: I don't have any
14	insights into that.
15	MEMBER OCHILLO: Oh, okay. Well, then
16	we'll talk later.
17	MR. BARANOFF: I apologize. I'm
18	sorry, but I
19	MEMBER OCHILLO: Okay.
20	CHAIR BARTHOLME: Anyone on the phone
21	have any questions? All right. Thank you.
22	MR. BARANOFF: Sure. Thank you.

CHAIR BARTHOLME: So next we have a 1 2 slight modification to the agenda. Rather than Karen Schroeder joining us for a presentation, 3 we're going to be joined by Kurt Schroeder. 4 I've 5 been told there is no relation. And Kurt is the Chief of the Policy 6 Division at CGB, and he is here to give us an 7 8 update on unwanted call blocking and the FNRPM 9 -- PRM about measuring effectiveness of call blocking standards, which should lead to the 10 joint report by the FCC and FTC on the issue. 11 12 MR. SCHROEDER: That's right. Thank 13 you. MR. MARSHALL: I think that mic --14 15 MR. SCHROEDER: Oh, okay. Is that 16 better? Okay. 17 MR. MARSHALL: Yes. I mean, I think 18 your presentation is on that laptop. 19 MR. SCHROEDER: Oh, okay. 20 MR. MARSHALL: Yes. And you have a 21 clicker there to flip through the pages. 22 MR. SCHROEDER: Okay. That's not me.

1 Let's see. Here we go. There we go. All 2 righty. 3 Yes, thanks. I hope you're not too 4 disappointed that Karen Schroeder isn't here. 5 I'll try to live up to our joint name and do as well -- at least as well as she would have done, 6 7 and she would have done very well. 8 The Commission adopted in November at 9 -- at the November 2017 Commission meeting, a report and order and further notice of proposed 10 rulemaking. And, let's see, is that coming up 11 12 right? Yes. 13 As you might guess, that document 14 included new rules, further notice of proposed 15 rulemaking, and then also directed the Consumer 16 and Governmental Affairs Bureau, in conjunction 17 with the FTC, to do a report on the state of call 18 -- or the state of robocalling in the country, as 19 we see it now. The new rules allow voice service 20 21 providers to block certain types of calls, and those rules went into effect just a couple of 22

weeks ago on February 12th. Voice service 1 2 providers may now block calls that appear based on caller ID to originate from, first, do not 3 4 originate numbers. 5 Those are numbers where the subscriber, the actual subscriber, has requested 6 7 the blocking of outbound calls purportedly from 8 those numbers that are used only for inbound 9 calls. A well-known example of that kind of 10 11 blocking involved the IRS scam that probably a 12 lot of you are familiar with. The IRS asked that 13 toll-free numbers that they used only for inbound 14 calls from taxpayers be blocked if they were showing up on outbound calls that were going to 15 16 people, and that -- as I understand it, that 17 blocking has been fairly successful in tamping 18 down that scam, although I don't think it has 19 gone away completely. 20 Also, invalid numbers, you know, for 21 example, if all zeroes comes up on caller ID, 22 that's something that can be blocked because

there isn't a valid all-zero number under the 1 2 North American Numbering Plan. As far as I know, the only number --3 the only repeat number that is valid under the 4 5 North American Numbering Plan is the so-called all-eights number, which is highly sought after 6 7 and has even been the subject of some litigation 8 because of that. 9 But in any event, there are also unallocated numbers. The number hasn't been 10 allocated to a service provider by the North 11 12 American Numbering Plan administrator or the 13 pooling administrator. If it's known that a 14 number hasn't been allocated, there is no valid reason it should be showing up as the originating 15 16 number for a call. 17 And then unused numbers. Those are 18 numbers that have been allocated to a service 19 provider but not assigned to a subscriber. 20 The Commission adopted these rules to 21 give the industry some flexibility in blocking illegal calls. The blocking is voluntary. 22 We

hope the industry will get on board and do what 1 2 they can to block these kinds of calls, but we're not requiring carriers to do that. 3 The rules, we think, outline very 4 5 specific, well-defined circumstances where voice service providers can block calls that are highly 6 7 likely to be illegitimate because there is no 8 lawful reason to spoof those particular kinds of 9 phone numbers. Moving on to the further notice, 10 11 that's part of the same document. It seeks 12 comment on two discrete issues. First, it seeks 13 comment on potential mechanisms to ensure that 14 erroneously blocked numbers can be unblocked as

16You know, we all hope that there17aren't going to be a lot of errors in blocking

quickly as possible.

17 aren't going to be a lot of errors in blocking 18 number -- or calls based on the kinds of phone 19 numbers that I have just described. But if that 20 does occur, we're asking about what the formal 21 challenge mechanism should be, should the 22 mechanism be different based on the size of the

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carrier, you know, what challenge mechanisms are
 carriers or service providers already using or
 considering to use.

4 Is there a process beyond our current 5 informal complaints process that should be used to help sort out these erroneously blocked calls, 6 7 if any? And another thing that's probably kind 8 of important is, you know, how should callers be 9 informed when their calls are already blocked or are being blocked? They won't know, of course, 10 11 to challenge those calls if they believe their 12 calls are lawful unless they know they're being blocked. 13

14 And then, you know, how do -- how can we assure that calls will be unblocked if blocked 15 What kind of credible claim needs to 16 in error? 17 be made by the caller to make that known to the 18 providers who are doing the blocking? 19 And, you know, kind of the flip side 20 of that is, how do we prevent abuse of the 21 challenge mechanism? You know, we certainly don't want unlawful robocallers to be challenging 22

the blocking of their calls, and yet you can see very easily that there would be an incentive to

And then, finally, you know, should there be a mandated timeframe for unblocking calls that have been blocked in error?

7 The second thing the further notice 8 seeks comment on is the ways to measure the 9 effectiveness of the FCC's robocalling efforts as 10 well as the efforts of the industry. Should we 11 adopt a reporting obligation for voice service 12 providers, for example? And, if so, what kind of 13 information should be collected?

14 Should we ask them to provide information about false positives when they have 15 16 blocked calls in error, for example? How often 17 should information be reported? Annually? 18 Quarterly? How would the data help us evaluate 19 the effectiveness of the blocking that is going 20 on? 21 What are the consumer benefits? How

can we measure that? And then, what's the cost

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do that.

1	of any reporting that we might require? And
2	should small providers have some different
3	obligation as far as reporting goes?
4	An alternative is using data that we
5	already have from our Consumer Complaints Center
6	that, you know, does provide us with a lot of
7	good information already, and the question is,
8	really, do we need more information than that?
9	And then, what other data sources are there?
10	The comment period has just closed at
11	the end of toward the end of last week on
12	February 22nd, but we expect that interested
13	parties will still come in to do ex parte
14	presentations, you know, during the during the
15	time when the Commission is looking at the
16	record.
17	And then, finally, in the November
18	item, as I said, we were directed our bureau
19	was directed to draft a report, in consultation
20	with the FTC, on the state of robocalling in the
21	U.S. It told us some specific things that the
22	Commission would like us to do.

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1	One is shed light on the issue of
2	robocalling generally, and how that how that
3	information can inform FCC actions going forward.
4	They'd like the report to encompass both progress
5	made by the industry, also by government, also by
6	consumers, in combating illegal robocalls.
7	I think, you know, we've all played a
8	part so far, and the Commission wants to know
9	where things stand with that, as well as looking
10	at the remaining challenges to continuing these -
11	- and improving these efforts along the way.
12	We are also being asked to focus on
13	quantitative data as much as possible. That
14	would include calling trends and consumer
15	complaints, which we think should provide some
16	insight into the current state of the robocalling
17	problem, how to target additional measures to
18	help consumers avoid the kind of fraud and
19	annoyance that they're already experiencing.
20	The report is due to the Commission
21	next January.
22	And that pretty much sums up the

November report and order and further notice. 1 2 The last slide is Karen Schroeder's email address and phone number, if you have questions. 3 But, 4 you know, really feel free to call me or any of 5 the managers in the Consumer Policy Division if you have questions, as well as Karen who was the 6 author of the item. 7 So, anyway, with that, should I open 8 9 it up for questions? 10 CHAIR BARTHOLME: Sure. You can, yes. If there are any 11 MR. SCHROEDER: Yes. 12 questions, I'll be glad to --13 CHAIR BARTHOLME: Susan? 14 MR. SCHROEDER: -- answer them. 15 MEMBER GRANT: Hi. Susan Grant from Consumer Federation of America. So in preparing 16 17 this report, will you be asking all of the 18 carriers what measures they have implemented so 19 I note that even in the -- in allowing far? 20 carriers to block these calls that seem pretty 21 obvious on their face to be fraudulent, it's not 22 a requirement. So some carriers will do this;

others may not.

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2	Will you be getting more than just a
3	general report from industry associations, but
4	actually hard numbers from the carriers
5	themselves about what steps they have taken, how
6	many consumers have signed up, if that's
7	required, or exactly what each of them is doing,
8	so that we can compare between carriers?
9	MR. SCHROEDER: Yes. I that's
10	certainly the kind of information we're hoping to
11	get. At this point, I can't say that we're
12	looking to require carriers to provide certain
13	information, but, you know, as we work out the
14	process for gathering the information, we're
15	going to be looking for carriers as well as just
16	the public at large to provide us with the
17	information we need there.
18	We may this hasn't been decided
19	finally yet, but we may, for example, issue a
20	public notice asking for comment.
21	CHAIR BARTHOLME: Francella, did you
22	or is that up from last time? Oh.

MEMBER OCHILLO: It's up from the last 1 2 time. 3 CHAIR BARTHOLME: Sorry. 4 MEMBER OCHILLO: I'm sorry. CHAIR BARTHOLME: 5 That's okay. Anybody on the phone have any questions or 6 7 comments? 8 MEMBER MCELDOWNEY: This is Ken Yes. 9 McEldowney. I'm from Consumer Action. I quess 10 I'm very surprised by the response to the answer 11 to Susan's question. 12 I just can't imagine how the FCC's efforts can be effective without requiring that 13 data from the carriers. I would think that the 14 carriers who have been doing a great job would 15 16 voluntarily come forward; the ones that were 17 doing less than a great job would not come 18 forward, so the problem would continue. 19 Well, yes. MR. SCHROEDER: That's 20 certainly something we're going to need to 21 consider as we gather information. You know, as 22 I mentioned, we haven't made a final decision

about exactly how to gather the information. 1 One 2 option is issuing a public notice. The responses to the public notice of course would be 3 4 voluntary. 5 If we don't see information coming in 6 that we think would be essential to drafting the 7 report, we may have to take further steps to gather that information. 8 9 Other questions? 10 CHAIR BARTHOLME: Other questions on I would add, before you leave, that 11 the phone? 12 there is a wealth of knowledge and a diversity of 13 backgrounds right here at this table. And if you 14 can -- if you find ways that we can be helpful in getting you information, or other ways that we 15 16 can be helpful as you work to assemble this 17 report, please feel free to call on us, you know, 18 reach out to Scott or myself. We're always happy 19 to form a small group, a large group, whatever 20 makes the most sense, and be as helpful as we 21 can. Well, thank you. 22 MR. SCHROEDER:

We'll certainly keep that in mind and take you up 1 2 on it. CHAIR BARTHOLME: Thanks. 3 4 MR. SCHROEDER: Thank you. CHAIR BARTHOLME: 5 Okay. Next on the agenda, we have -- we have a recommendation that 6 7 is for consideration, and this recommendation 8 came through the efforts of the Robocall Working 9 Group. The focus of the recommendation is on 10 call authentication technology and tools 11 12 primarily, but it also has some other action items that are focused on combating robocalls 13 14 more broadly. It was sent around to the full CAC in advance of the meeting, and I believe there is 15 16 a copy in each folder. Correct, Scott? 17 MR. MARSHALL: Yes, sir. 18 CHAIR BARTHOLME: Kevin, did you want 19 to say anything in regards to the recommendation? 20 Sorry to put you on the spot, but Kevin is the 21 co-chair with myself of the working group, so I 22 thought --

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1	MEMBER RUPY: No. I think I think
2	you covered it very well, Ed, and, you know, I'll
3	just say I definitely appreciate all the efforts
4	within that working group to focus on this issue.
5	Caller ID authentication is certainly a key
6	aspect in the fight against robocalls.
7	And, you know, as you look through the
8	recommendation that we did put together, we talk
9	about, you know, the narrative. The lead-in
10	narrative provides an overview as to why spoofing
11	is such a challenge in the robocall space, you
12	know.
13	In addition to fooling consumers and,
14	you know, giving them false information that may
15	make them more likely to fall for a scam, you
16	know, the ability of these bad actors to spoof
17	the numbers also makes it more challenging for
18	the blocking services and labeling services that
19	are out there to, you know, stay on top of this
20	ever-changing series of numbers.
21	And then, finally, you know, with
22	spoofing, it does make it that more challenging

for law enforcement to trace these calls back, so that we can find the folks that are behind these calls.

But the group did put together a good 4 5 series of recommendations to the FCC. And as Ed noted, we kind of put them into two buckets. 6 We have, you know, the first set of three 7 8 recommendations that are focused more on the 9 caller ID authentication and SHAKEN, STIR. And then the last five set of recommendations that 10 11 are focused on robocalling more broadly. 12 And, you know, happy to discuss or 13 answer any questions that folks may have on this. 14 CHAIR BARTHOLME: Can we first get a 15 motion to move the recommendation to the floor? MEMBER WITANOWSKI: 16 I'll move. 17 CHAIR BARTHOLME: Krista, thank you. 18 Julie seconded. Thank you. All in favor? 19 (Chorus of ayes.) 20 CHAIR BARTHOLME: **Opposed**? 21 Abstentions? 22 Okay. Discussion.

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1 MEMBER WITANOWSKI: I just want to 2 thank this group for working so hard on this recommendation. I think it just goes to the fact 3 that this CAC has worked so hard on the front end 4 5 to put these recommendations together that we have nothing to say. It's perfect. 6 Thank you. (Laughter.) 7 8 CHAIR BARTHOLME: So Krista just took 9 your chance, if you planned on saying anything. She --10 11 (Laughter.) 12 CHAIR BARTHOLME: So does anyone want 13 to call the question? Debbie calls the question. So all in favor of the recommendation? 14 15 (Chorus of ayes.) 16 CHAIR BARTHOLME: Opposed? Abstentions? 17 18 Okay. All right. So that passes. 19 Thank you, everyone. 20 (Applause.) 21 CHAIR BARTHOLME: Yes. So now we have 22 a little bit of an expanded opportunity for our

working group time. We'd like to structure this 1 2 in a way that allows people to participate in multiple working groups, because I know there are 3 a number of CAC members who are also members of 4 5 multiple working groups. Unfortunately, we do get to do a 6 7 little bit of field tripping today because the 8 conference rooms closest to us were unavailable. 9 So everybody gets to get a map and a compass and 10 -- no, I'm --11 (Laughter.) 12 CHAIR BARTHOLME: Scott and Catherine 13 will be leading people to the harder --14 MR. MARSHALL: Yes. 15 CHAIR BARTHOLME: -- work -- or the 16 harder conference rooms to locate within the 17 building. 18 MR. MARSHALL: 402, 442, which we 19 usually use, is right down the hall to my right, and then it will be on your left after you pass 20 21 the intersecting corridor. So we do have that room on the 12th Street level. And then the 22

other rooms, we'll have to go to the other 1 2 floors. And USF will stay in here. Okay. 3 CHAIR BARTHOLME: So our plan 4 is going to be that the Broadcast Repack Working 5 Group and the Slamming and Cramming Working 6 Groups will be the first two working groups 7 during the time block that we have, and those 8 groups will meet from when we leave the room now 9 until about 1:50. Repack and which? 10 MR. MARSHALL: 11 And those are also CHAIR BARTHOLME: 12 the two working groups that are the furthest 13 away. So we're going to take you far away in the 14 hopes that when we have the second two you're 15 close and we can just dive right back in and wrap 16 up the meeting for the day. 17 So Broadcast Repack and Slamming and 18 Cramming. Broadcast Repack is going to be in 19 West Room 3C-858, and Catherine will lead you 20 there. 21 MR. MARSHALL: Right. 22 CHAIR BARTHOLME: The Slamming and

1	Cramming Working Group is going to be in West
2	Room 1C-858, and Scott
3	MR. MARSHALL: That's correct.
4	CHAIR BARTHOLME: will be leading
5	everyone there.
6	At 1:50, we'll switch, and the second
7	part of the time block will be devoted to the
8	Robocalls Working Group and the USF Digital
9	Inclusion Working Group.
10	The Robocalls group will be just down
11	the hall in A405/442. That's the one that we
12	frequently use for these meetings. And the USF
13	group will be here in the CRM, as is standard
14	operating procedure for that group. So
15	MR. MARSHALL: And once you get up
16	into your rooms, we'd like the working group
17	leaders to establish the conference call bridge,
18	and you do that with the information that's on
19	the sheet in your packets, just as you would if
20	you were doing an ordinary offsite conference
21	call with your group.
22	And also, if you need the people on

1 the upper floors, that's behind a locked door. 2 So if you need to get out and need to return, give Catherine a call on her phone. 3 And if you could jot this number down, 4 5 we didn't put that in a sheet. We should have. It's (202) 853-6204. (202) 853-6204. 6 And she 7 will come up and let you in and out of the suite 8 area if you need to exit for any reason and 9 return. So, quickly, let's 10 CHAIR BARTHOLME: have a five-minute comfort break. 11 The tour 12 guides will depart at 1:15 from --13 MR. MARSHALL: 1:15. 14 CHAIR BARTHOLME: -- this room to take you to your meeting location. 15 16 MR. MARSHALL: And tips are always 17 welcome. No, I'm teasing. 18 (Whereupon, the above-entitled matter 19 went off the record at 1:09 p.m. and resumed at 20 2:33 p.m.) CHAIR BARTHOLME: Okay. Welcome back, 21 Thank you for taking time to 22 everyone.

participate in the working group meetings. 1 Ι 2 hope that everyone found them to be productive and had a chance to have a good discussion. 3 4 So as we come back to the room, the next 5 thing on our agenda is to have some report-outs from those working group meetings. We'll start 6 with Steve and the Repack Working Group. 7 MEMBER POCIASK: All right. So there 8 9 was an idea that came up, so we're going to be looking into it. And it's -- well, with the 10 11 Commerce Committee passage that -- of the RAY 12 BAUM Act, it's H.R. 4986, there would potentially be dollars set aside for a consumer education 13 14 fund, and that education and outreach to consumers would be in connection with the FCC's 15 16 coordinating the education on the general 17 repacking.

So we're going to be thinking about and potentially working on a recommendation that would have some principles on how that money might be best spent, maybe efficiently or coordinating with other groups on the ground, to

reach consumers that are affected by the 1 2 transition, or most affected, including those with disabilities and others, potentially grass 3 4 roots coordination and broadcasters, and so on. 5 So that's sort of the broad idea that we're going to be looking into. 6 It's -- and if 7 the bill does move, then we also hope to get some 8 sort of presentation from the FCC on the lessons 9 they have learned from the TV transition to see if there is anything that we might be thinking 10 11 about as we look closer into this issue. But 12 that -- that's sort of the task right now. 13 And that's all we have. 14 CHAIR BARTHOLME: Okay. Thank you. 15 USF? 16 MEMBER FAZLULLAH: Hi. This is Amina 17 Fazlullah. We had a great short call and in-18 person meeting. We've decided to put together a 19 lifeline recommendation, refresh our original 20 recommendations for the docket, the current 21 lifeline docket. And right now we're unclear on 22 timing, so we're going to check in with FCC staff

1 to figure out timing. 2 3 But it's possible that we'll be able to 4 utilize the June -- upcoming June meeting to pass 5 through the recommendation, but there may be some need, depending on timing, for the order on 6 lifeline to request a phone meeting to pass 7 through the full CAC. 8 9 So that's it right now. 10 CHAIR BARTHOLME: Okay. And are you 11 guys envisioning new language or just --12 MEMBER FAZLULLAH: Some new language and 13 some refresh, yes. 14 CHAIR BARTHOLME: Okay. Great. All So we'll look forward to that. 15 right. 16 MEMBER BERLYN: Is this to -- is this to submit in the current NPRM? 17 18 MEMBER FAZLULLAH: Correct. Yes. So 19 there is -- initial comments just closed. 20 Replies --21 MEMBER BERLYN: Last week. 22 MEMBER FAZLULLAH: -- are open for

another month, and then, depending on when the 1 2 order comes out and sunshine kicks in -- or is set to come out and sunshine will kick in, we may 3 4 be able to still place our recommendations. So 5 that's what we're aiming for is that sort of period after replies. 6 7 MEMBER BERLYN: So is there a possibility we might have to consider this before 8 9 our next meeting, then? 10 MEMBER FAZLULLAH: That's right. That's 11 right. 12 MEMBER BERLYN: Okay. 13 So we may be able to MEMBER FAZLULLAH: make it for June, but there's a possibility we'll 14 15 need to do a phone call before. 16 CHAIR BARTHOLME: Any other questions? 17 Okay. Susan, did you want to do Slamming and 18 Cramming? 19 MEMBER GRANT: Sure. So there was an 20 open proceeding on Slamming and Cramming in which 21 consumer organizations and carriers and others 22 have shared their perspectives on the extent of

the problem and what should be done about it or the problems.

And there are very divergent views in those comments, and those have been reflected in our breaking group conversations as well. But I think there are some areas in which we can converge on a recommendation, which we'll be working on.

9 One is consumer education. More could 10 be done about that. I think robocalls is the 11 sexy topic of the moment, and it was interesting 12 to hear this morning about all the different 13 materials that are going to be rolled out about 14 that.

15 I'm not clear on whether some of those 16 new materials will also be about slamming and 17 cramming, but I personally would love to see some 18 more innovative consumer education materials in 19 that regard, and I think that's a view that is 20 shared in the breaking group. So we will talk 21 about consumer education and a possible 22 recommendation.

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Also, making the difference between
slamming and cramming more understandable on the
FCC consumer complaint form, this is kind of a
challenge because we have a sort of hybrid type
of complaint now where consumers in some cases
are being charged for a third party's phone
service on their bill, whether or not they have
actually been switched to that phone company. So
it's kind of a hybrid of slamming and cramming.
And it's important for the FCC to have
as good as information as is possible in order to
quantify these problems. We want to probably
encourage the FCC to continue focusing its
enforcement efforts to combat the problem, so
that would be the the third thing that we may
touch on.
And then, finally, one of the proposals
in the FCC's notice is about banning
misrepresentations in sales of telephone service.
Surprisingly, there isn't any rule that says that
that is illegal. But it seems like a good idea.
I think related to that is the question

1 of how long the carrier should keep records of 2 the sales call. Most carriers make recordings of 3 sales calls, but they can be costly to retain in 4 the volume that -- of those calls that are made 5 over a long period of time. So we talked about what would be a 6 7 reasonable period of time to keep those recordings. Hopefully, we'll be able to reach 8 consensus about that. 9 10 And in regard to banning 11 misrepresentations, one of the concerns that 12 carriers expressed was about strict liability. They wouldn't want to be liable for individual 13 14 incidents that may happen, and rather than 15 something that points to a systemic problem. 16 So it sounds like we may be able to make 17 a suggestion in that regard to resolve that 18 concern and support the idea of banning these 19 misrepresentations. 20 CHAIR BARTHOLME: Any questions? Thank 21 you. 22 Robocalls. So I'll throw it to you,

1 Kevin, since I've talked a lot today. 2 MEMBER RUPY: Fair enough. Thank you, 3 Ed. 4 So we have a good -- good meeting of the 5 working group, the Robocalls Working Group. And among the topics we discussed, we did talk about, 6 7 you know, whether there is any areas that we can work on with respect to the upcoming January 2019 8 report, you know, with that coming down the 9 10 line. 11 Two other areas, though, that there seemed to be a lot of interest in was talk about 12 13 two separate issues. First, robocall enforcement 14 and looking at if there is ways that we can talk 15 about and, you know, encourage stronger law enforcement efforts against some of these bad 16 17 actors. 18 You know, the main point being there 19 that while we have certainly applauded a lot of 20 the good enforcement work that the FCC has done, 21 as well as the FTC, that's civil enforcement. 22 And, you know, so we want to explore

whether there are ways we can encourage either or both agencies to, you know, perhaps partner with criminal law enforcement efforts, so that, you know, instead of slapping a fine on a bad actor that may or may not be paid, you know, we put people behind bars where, quite frankly, they belong, given the substantial financial harm that can result from these activities.

9 The other area that we wanted to look at 10 was in the area of -- that's teed up in the 11 further notice in the FCC's robocalling further 12 notice in the area of false positives, 13 particularly with respect to, you know, some of 14 the third-party services that are out there.

15 So, in other words, you know, when you 16 have -- whether it's a small business or a 17 consumer that, because of the nature of spoofing, 18 their number has been spoofed and now they're 19 being blocked or labeled on a service that's out 20 there, a consumer opt-in service, you know, what 21 are some of the ways that they can resolve that 22 dispute.

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1	So I think those are the two areas that
2	we were looking at. And if I missed anything, Ed
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4	CHAIR BARTHOLME: No, I think that's
5	MEMBER RUPY: chime in.
6	CHAIR BARTHOLME: spot on. Spot on.
7	MEMBER RUPY: All right.
8	CHAIR BARTHOLME: And I think the sad
9	news is that it's not over, and we'll continue to
10	look for
11	(Laughter.)
12	CHAIR BARTHOLME: other ways we can
13	be helpful to the Commission in the space of
14	robocalls.
15	MEMBER RUPY: Absolutely.
16	CHAIR BARTHOLME: So next on our agenda
17	we have a block of time for comments from the
18	public. I'm not sure if we got any advance in
19	advance this time, Scott?
20	MR. MARSHALL: No.
21	CHAIR BARTHOLME: Okay.
22	MR. MARSHALL: I assume we didn't get

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1 anything on the social media channels or we would 2 have heard about that. 3 CHAIR BARTHOLME: Not really. 4 Okay. And then there were a couple of 5 people who flagged me today to mention upcoming events that are relevant for many of us at the 6 7 table. So I want to give all those folks a 8 chance to sort of share what they have coming up. 9 We'll start with Barry. 10 MEMBER UMANSKY: Sure. Thanks, Ed. 11 A couple of years ago the wonderful 12 people who brought you the Digital Policy 13 Institute created the Telecommunications Research 14 and Policy Institute. 15 And we are getting ready to unveil on 16 March 7th the triennial update and something 17 called the Net Vitality Report. It's something 18 that Stuart Brotman, who many of you know, he has 19 been at Brookings, Harvard, actually was instrumental in creating the old Office of 20 Telecommunications Policy, the predecessor to 21 NTIA, he has done this report a couple times in 22

the past. It is the only one of its kind. 1 It compares the county-by-country leaders in the 2 3 internet in terms of applications, speed, services, and it's a two-volume set. 4 5 The first volume will be unleashed at a press conference at the National Press Club the 6 7 morning of March 7th. It's a Wednesday. We'll 8 have copies there, and it will be available online shortly thereafter. 9 And then, in June, we'll have a second 10 11 volume, which is the statistical basis for the 12 conclusions in the first report. That should be out around June, and I'd like to perhaps have a 13 14 further discussion, a little more substantive, at the June meeting of the CAC. 15 16 Ed, thanks. 17 CHAIR BARTHOLME: Thank you. Susan? 18 MEMBER GRANT: Consumer Federation's 19 annual conference, Consumer Assembly, will be May 10th and 11th at the Embassy Suites Convention 20 Center Hotel in downtown D.C. And in the 21 afternoon of the 10th, there will be a session 22

1 about the progress and the challenges that remain 2 concerning robocalls, and also other issues that 3 have come up in the application of the Telephone 4 Consumer Protection Act to various kinds of 5 calls. So I invite you all to come. 6 7 CHAIR BARTHOLME: Amina? MEMBER FAZLULLAH: Hi. NDIA will be 8 holding Net Inclusion April 17th through 19th in 9 10 Cleveland, Ohio. And there will be a number of tracks, some of them focusing on USF issues and 11 other digital inclusion issues as well. 12 13 CHAIR BARTHOLME: Thank you. Scott and 14 I have sort of looked at the year ahead, and our charter expires in late October. So with the 15 16 idea of getting times locked in for next 17 meetings, we flagged two possible dates in both 18 June and October for meetings. 19 So, Scott, can you share those dates 20 with the --21 MR. MARSHALL: Sure. June 8th and 11th, 22 in June, and October 15th and 19th for the

1 October -- last meeting of this term. One of 2 those dates is a Monday, and the other one is a 3 Friday. I mean, I can tell you exactly, if you give me a minute here, which is which. 4 5 MEMBER BERLYN: The 8th is a Friday. MR. MARSHALL: 8th is a Friday? Okay. 6 7 And then the 11th is a Monday. And I think the 8 15th is a Monday and --The 19th is a Friday. 9 CHAIR BARTHOLME: MR. MARSHALL: -- the 19th is the 10 11 Friday. Yes. MEMBER BERLYN: So the 15th is not the 12 13 holiday? 14 CHAIR BARTHOLME: No, it is the 8th. 15 The 8th is the holiday? MEMBER BERLYN: 16 CHAIR BARTHOLME: According to the calendar program I use, so --17 18 MEMBER BERLYN: Okay. Yep, you're 19 right. 20 MR. MARSHALL: And I was able to pre-21 reserve this room, so that would not have been 22 possible if it was a federal holiday.

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1	MEMBER KEARNEY: Scott?
2	MR. MARSHALL: Yes.
3	MEMBER KEARNEY: This is Julie. I think
4	the 11th is the M-Enabling Summit, the 11th of
5	June, the Monday, just as an FYI.
6	MR. MARSHALL: Well, I don't want to
7	compete with that, that's for sure.
8	CHAIR BARTHOLME: Thank you, Julie.
9	MR. MARSHALL: All right. Well, that
10	makes the decision a little different.
11	CHAIR BARTHOLME: Looks like the 8th in
12	June, and then the 15th and 19th are out there.
13	If you have a conflict or your organization has
14	an event, please let Scott and I know sooner
15	rather than later, and we will try to finalize
16	these two dates. But for the time being, if you
17	could hold sort of tentatively hold those
18	spaces in your calendar, that would be much
19	appreciated.
20	If you have any feedback about today's
21	programming or the topics that we covered, if you
22	have a request and a burning desire to learn more
I	n I

1 about public safety, we can connect you with a 2 number of the speakers who presented today. I 3 thought it was a very good agenda, very 4 interesting. But please let us know what your 5 thoughts were, and thank you all for spending the better part of the day with us. 6 7 MR. MARSHALL: Indeed. 8 CHAIR BARTHOLME: We appreciate it. 9 MR. MARSHALL: Thank you very much. 10 CHAIR BARTHOLME: So I will --11 MR. MARSHALL: Safe travels. 12 CHAIR BARTHOLME: -- entertain a motion 13 to adjourn. 14 MEMBER POCIASK: Moved. 15 CHAIR BARTHOLME: Second. In favor? 16 (Chorus of ayes.) 17 CHAIR BARTHOLME: Opposed? Abstentions? 18 MR. MARSHALL: Nobody is going to 19 abstain? I mean, come on now. Really. 20 (Whereupon, the above-entitled matter 21 went off the record at 2:50 p.m.) 22

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In the matter of: Consumer Advisory Committee Meeting

Before: FCC

Date: 02-26-18

Place: Washington, DC

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