

**Anna M. Gomez**  
**Senate Commerce Committee Nominee Questionnaire**

**Senate Commerce Committee Nominee Questionnaire, 118th Congress**

Instructions for the nominees: The Senate Committee on Commerce, Science, and Transportation (the “Committee”) asks you to provide typed answers to each of the following questions. It is requested that the nominee type the question in full before each response. Do not leave any questions blank. Type “None” or “Not Applicable” if a question does not apply to the nominee. Begin each section (i.e., “A”, “B”, etc.) on a new sheet of paper. Electronically submit your completed questionnaire to the Committee in PDF format and ensure that sections A through E of the completed questionnaire are in a text searchable and that any hyperlinks can be clicked. Section F may be scanned for electronic submission and need not be searchable.

**A. BIOGRAPHICAL INFORMATION AND QUALIFICATIONS**

1. Name (Include any former names or nicknames used):

Anna Marie Gomez

2. Position to which nominated:

Commissioner, Federal Communications Commission

3. Date of Nomination:

May 30, 2023

4. Address (List current place of residence and office addresses):

***Office***

U.S. Department of State  
Bureau of Cyberspace and Digital Policy  
2201 C Street, N.W.  
Washington, DC 20520

***Home***

[REDACTED]

5. Date and Place of Birth:

February 17, 1967; Orlando, FL

6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

I am not married and have no children.

My Domestic Partner is Kirk Burgee, Attorney Advisor, Wireline Competition Bureau of the FCC. He is retiring summer 2023.

7. List all college and graduate schools attended, whether or not you were granted a degree by the institution. Provide the name of the institution, the dates attended, the degree received, and the date of the degree.

- 1989 – 1992, George Washington University National Law Center, Juris Doctorate '92
- 1985 – 1989, Pennsylvania State University, Bachelor of Arts (Prelaw) '89

8. List all post-undergraduate employment, including the job title, name of employer, and inclusive dates of employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

**Post-Undergraduate Employment**

- Temporary Secretary, The Byrnes Group, June – August 1989
- Legal Intern, Office of Commissioner Gallegos, Equal Employment Opportunity Commission, May 1990 – April 1991
- Summer Associate, Arnold & Porter, May – August 1991
- Law Clerk, Arnold & Porter, October 1991 – May 1992

- Associate, Arnold & Porter, September 1992 – September 1994

**Management-level and non-managerial jobs that relate to the position for which nominated:**

- Counsel to the Chief, Common Carrier Bureau and Attorney, Consumer Protection Division, Cable Services Bureau, Federal Communications Commission, September 1994 – November 1996
- Democratic Counsel, Subcommittee on Communication, Committee on Commerce, Science and Transportation, U.S. Senate, November 1996 – February 1997
- Deputy Chief of Staff, National Economic Council, White House, February – September 1997
- Deputy Chief and Chief, Network Services Division, Common Carrier Bureau, September 1997 – October 1999
- Deputy Chief, International Bureau, Federal Communications Commission (FCC), October 1999 – January 2006
- Senior Legal Advisor, Office of Chairman William E. Kennard, FCC, July 2000 – February 2001
- Vice President, State and Federal Regulatory, Government Affairs, Sprint Nextel, January 2006 – January 2009
- Obama-Biden Transition Team (USTR) (November 2008 – January 2009)
- Deputy Assistant Secretary for Communications and Information, National Telecommunications and Information Administration, U.S. Department of Commerce, January 2009 – April 2013
- Partner, Wiley Rein LLP, May 2013 – June 30, 2022
- Biden-Harris Transition Team (Commerce/NTIA) (November 2020 – January 2021)

- Senior Advisor, Bureau of Cyberspace and Digital Policy, January 16, 2023 – Present

9. Attach a copy of your resume.

Please see Attachment A.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above after 18 years of age.

- Member, Vice Chair, and Chair, FCC's Advisory Committee on Diversity and Digital Empowerment (ACDDE)
- Chair Emeritus and Member, FCC Communications Equity and Diversity Council (CEDC)

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution.

- Partner, Wiley Rein LLP
- Vice President, Sprint Nextel
- Secretary, Assistant Secretary, Treasurer, Assistant Treasurer, Federal Communications Bar Association

12. Please list each membership you have had after 18 years of age or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religiously affiliated organization, private club, or other membership organization. (For this question, you do not have to list your religious affiliation or membership in a religious house of worship or institution.). Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or disability.

I am unaware that any of the following organizations restricts membership on the basis of sex, race, color, religion, national origin, age, or disability:

- 1994 – Present, Federal Communications Bar Association, Former Assistant Secretary, Secretary, Assistant Treasurer, Treasurer, and

Member of Women's Leadership, Annual Seminar, and Nominations Committees.

- Approximately 1992 - Present, Hispanic Bar Association of D.C., Former Board Member.
- Approximately 2017 – Present, National Hispanic Bar Association.

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt.

No.

14. List all memberships and offices held with and services rendered to, whether compensated or not, any political party or election committee within the past ten years. If you have held a paid position or served in a formal or official advisory position (whether compensated or not) in a political campaign within the past ten years, identify the particulars of the campaign, including the candidate, year of the campaign, and your title and responsibilities.

All these positions were unpaid:

- Co-Chair, Biden-Harris 2020 Campaign Broadband, Telecom, and Digital Equity policy subcommittee (June – November 2020)
- Co-Chair, Biden-Harris 2020 Campaign Innovation Committee GOTV Task Force (September - November 2020)
- Chair, Pete Buttigieg Campaign Technology Policy Committee (November 2019 – March 2020)

15. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$200 or more for the past ten years.

- Jay Gonzalez, \$250 (10-12-2018)
- Northam for Governor, \$250 (04-25-2017) and \$100 (08-11-2017)
- Phil Weiser, \$1,150 (06-27-2017) and \$1,000 (11-26-2019)
- Alex Ross and Julie Verrati, \$500 (12-13-2017)
- Edward (Smitty) Smith, \$500 (8-10-2014) and \$500 (8-1-2014)

- Bill Nelson, \$1,000 (08-08-2017)
- Friends of Sherrod Brown, \$250 (11-09-2017)
- Kaine for Virginia, \$250 (08-02-2018), \$2,000 (04-11-2016), and \$500 (6-26-2017)
- DNC Services Corp, \$2,000 (06-27-2016)
- Hillary for America, \$2,700 (06-27-2016), \$1,000 (01-11-2016), \$1,000 (05-31-2016), and \$700 (06-27-2016)
- Hillary Victory Fund, \$5400 (06-27-2016)
- Doug Jones for Senate Committee, \$250 (11-13-2017)
- Democratic Senatorial Campaign Committee, \$1,000 (12-31-2018) and \$1,000 (12-31-2019)
- Klobuchar for Minnesota, \$250 (06-30-2018)
- COLIN4VA, \$200 (06-14-2013)
- Hawaii PAC, \$500 (01-03-2019), \$2020 (12-30-2020)
- Hawaii Senate Victory Fund, \$250 (12-30-2020)
- People for Ben, \$250 (06-19-2019) and \$250 (12-30-2020)
- Biden Victory Fund, \$500 (07-23-2020), \$500 (08-10-2020), \$15 (7-24-2020), \$50 (7-24-2020), \$25 (9-14-2020), \$50 (9-14-2020), \$100 (10-5-2020), \$100 (10-12-2020), \$25 (10-25-2020), and \$280 (02-07-2020)
- Biden for President, \$36.31 (7-08-2020), \$34.39 (7-18-2020), \$500 (7-23-2020), \$25 (9-14-2020), \$50 (9-15-2020), \$500 (8-10-2020), \$100 (10-5-2020), \$100 (10-12-2020), \$25 (10-25-2020)
- Movement Voter PAC, \$500 (11-16-2020)
- Pallone for Congress, \$250 (03-29-2019)
- Quentin Palfrey, \$500 (11-02-2021)
- Act Blue, \$100 (1-25-2020), \$100 (2-12-2020), \$110 (2-23-2020), \$100 (5-18-2020), \$27 (9-13-2020), \$25 (9-14-2020), \$50 (10-4-2020), \$27 (10-4-2020), \$2.70 (10-4-2020), \$108 (10-4-2020), \$10.80 (10-4-2020), \$28 (10-13-2020), \$27 (10-15-2020), \$2.70 (10-15-2020), \$31 (10-31-2020), \$3.10 (10-31-2020), \$50 (10-31-2020), \$5 (10-31-2020), \$50 (11-16-2020)
- Democratic Party of Wisconsin, \$27 (10-4-2020), \$27 (10-15-2020), \$31 (10-31-2020),

16. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

- Penn State Alumni Fellows Award (2013)

- PCIA/APCO Public Safety Sentinel Award (2013)
- Imagen Latina Leaders Award
- Association of Public Safety Communications Officials (APCO) Leadership in Advancing Communications Policy Award (2012)
- National Organization of Black Elected Legislative Women (NOBEL) Women Leaders in Technology Award (2012)
- Women in Cable Telecommunications Public Service Award (2011)
- FCBA Foundation Volunteer of the Year Award (2003)
- FCC Gold Medal (2003)
- FCC Chairman's Award (2001)

17. List each book, article, column, letter to the editor, Internet blog posting, or other publication you have authored, individually or with others. Include a link to each publication when possible. If a link is not available, provide a digital copy of the publication when available.

Please see Attachment B.

18. List all speeches, panel discussions, and presentations (e.g., PowerPoint) that you have given on topics relevant to the position for which you have been nominated. Include a link to each publication when possible. If a link is not available, provide a digital copy of the speech or presentation when available.

Please see Attachment C.

19. List all public statements you have made during the past ten years, including statements in news articles and radio and television appearances, which are on topics relevant to the position for which you have been nominated, including dates. Include a link to each statement when possible. If a link is not available, provide a digital copy of the statement when available.

Please see Attachment D.

20. List all digital platforms (including social media and other digital content sites) on which you currently or have formerly operated an account, regardless of whether or not the account was held in your name or an alias. Include the full name of an "alias" or "handle", including the complete URL and username with hyperlinks, you have used on each of the named platforms. Indicate

whether the account is active, deleted, or dormant. Include a link to each account if possible.

- LinkedIn: Anna Gomez, [www.linkedin.com/in/anna-gomez-2288ba19](http://www.linkedin.com/in/anna-gomez-2288ba19), active
- Twitter: Anna Gomez, @AMG8697, <https://twitter.com/AMG8697>, active
- Facebook: Anna Gomez, 4annagomez, [www.facebook.com/4annagomez/](http://www.facebook.com/4annagomez/), active
- Instagram: Anna Gomez, annagomez5262, <https://www.instagram.com/annagomez5262/?igshid=YmMyMTA2M2>, active
- Mastodon: AMG, AMG8697@mastodon.social, <https://mstdn.social/@AMG8697>, active
- Post: Anna Gomez, @amg8697, <https://post.news/@/amg8697>, active

21. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

- Testimony on the Digital Television Transition before the U.S. House of Representatives Subcommittee on Communications, Technology, and the Internet, Committee on Energy and Commerce (March 26, 2009)
- Testimony on NTIA Reauthorization before the U.S. House of Representatives Committee on Energy and Commerce Subcommittee on Communications and Technology (February 2, 2017)
- Testimony on Strengthening Our Communications Networks: Legislation to Connect and Protect before the U.S. House of Representatives, Committee on Energy & Commerce, Subcommittee on Communications and Technology (May 24, 2022)

22. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?



I am honored to have been nominated to be a Commissioner at the Federal Communications Commission because I truly love public service and believe I can make a difference for all consumers. I have served in various capacities at the State Department, FCC, NTIA, Congress, and the White House for approximately 18 years, and the lure of public service keeps pulling me back. I have been an effective leader throughout my career, and believe I can contribute positively, with all consumers in mind, to the FCC's agenda. Given my broad government experience effectively crafting and implementing telecommunications policy, I would be strategic, decisive, and passionate in representing consumers and the public interest.

### **Strong Policy Background**

With my extensive career in telecommunications, I have deep policy expertise that I can bring to bear as a Member of the FCC. I served for 12 years in various roles throughout the FCC, including positions in the Cable (now Media), Common Carrier (now Wireline Competition), and International Bureaus, as well as serving as Senior Legal Advisor to then-Chairman Kennard. I also served a short stint as Democratic Counsel to the Subcommittee on Communication, Committee on Commerce, Science and Transportation, U.S. Senate, and served as Acting Administrator and Deputy Administrator of NTIA. Currently, I serve as Senior Advisor at the Department of State, where I am leading U.S. preparations for the World Radiocommunication Conference. With this extensive background, I believe I have a broad view of communications policy.

I have served three times in the private sector. I started out my career as an associate at Arnold & Porter, where I worked on non-telecom matters; I was Vice President for State and Federal Government Affairs at Sprint for three years, and, at Wiley Rein, I counseled clients on telecom and unmanned aircraft matters for nine years. My private sector experience strengthens my ability to serve as a policymaker. Through serving in the private sector, I have gained a keen understanding of what motivates the telecommunications industry. I understand the impact of – and companies' ability to implement – regulatory requirements. I also understand the importance of competition and enabling innovation – for all parties, not just incumbents.

## **Importance of Stakeholder Outreach**

In my approximately 18 years at NTIA, the White House, the Hill, and now the State Department, I have had the opportunity to work with a number of domestic and international legislative and regulatory bodies. These include Congressional committees, federal agencies, state regulators, public safety entities, governors, mayors, tribal authorities, and international regulators. I have also negotiated policy outcomes among numerous government bodies.

I also understand the need to reach out and understand the views of all stakeholders on existing and proposed policies. Understanding the impact of practices and proceedings on stakeholders – consumers, civil society, government bodies, industry – is critical to effective policy making. If confirmed as a Commissioner, I will devote significant time to meeting with stakeholders throughout the country to hear and understand their perspectives.

## **Policy Commitments**

If confirmed as a Commissioner, in addition to supporting diversity in communications policy, I will also advocate for: strong consumer protection, including ensuring consumers benefit from free and open Internet protections and preserving competitive policies; vigilance in ensuring that any industry consolidation subject to the FCC's review does not harm consumers or competition and benefits the public interest; supporting policies to ensure that everyone in the country has access to affordable and ubiquitous broadband and voice communications; supporting effective and pro-competitive spectrum policies, including allocating both licensed and unlicensed spectrum to unleash continued innovations; ensuring firm and fair enforcement of the Commission's rules; advocating for and advancing policies so public safety first responders and communicators have the tools they need to keep communities and themselves safe; and encouraging and preserving diverse voices in the media.

23. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

If confirmed, one of my key responsibilities will be to work with the Chair, my fellow Commissioners, and the Office of the Inspector General to protect taxpayer dollars against waste, fraud, and abuse of any FCC programs, and to ensure that taxpayer dollars are spent efficiently and effectively.

I have managed several large organizations, including as Deputy Chief of the International Bureau at the FCC and as Acting Administrator and Deputy Administrator of the National Telecommunications and Information Administration, and believe those skills would help to ensure that the FCC has proper management and accounting controls.

24. What do you believe to be the top three challenges facing the department/agency, and why?

- 1) **Universal Access to Broadband:** While Congress has given the FCC many important tools to close the digital divide, there is still much work to be done to ensure that every American, regardless of geography (or income), has access to high-speed broadband. This includes ensuring support is coordinated across relevant federal, state, and tribal agencies to target those in most need of assistance, collecting timely and accurate data regarding the current state of broadband deployment, and being good stewards of taxpayer dollars through reducing waste, fraud, and abuse.
- 2) **Keeping Broadband Affordable:** Deploying broadband to every American is only half the battle. Ensuring those Americans adopt broadband is the other half. One of the biggest challenges facing broadband adoption is the lack of affordable, quality options for high-speed broadband services for low-income households. While Congress has given the FCC an incredibly important tool in the form of the Affordable Connectivity Program, a program on which millions of Americans now rely, the possibility that its funding may run out by Spring of 2024 will pose a serious challenge for consumers and for the FCC.
- 3) **Maintaining U.S. Global Leadership by Adopting a Spectrum Strategy to Meet Today's and Tomorrow's Needs:** Managing the nation's airwaves is always challenging given how intertwined they are with innovation and economic growth in the global economy. Spectrum enables many services on which Americans rely every day, like mobile broadband, remote learning, communicating on airplanes and ships, and GPS. That means ensuring

sufficient spectrum for existing and new commercial technologies, such as 5G, 6G, Wi-Fi, and satellites. It also means coordinating effectively with the National Telecommunications and Information Administration (NTIA) to ensure federal users of spectrum have sufficient resources to support the agencies' core missions. The FCC must maintain strong working relationships with all stakeholders, including the NTIA and other federal agencies, to ensure that technical issues regarding harmful interference are identified and addressed early, that testing is conducted in a consensus manner, and that any repurposing of existing spectrum is done effectively and efficiently.

## **B. POTENTIAL CONFLICTS OF INTEREST**

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts, such as a 401(k) or pension plan.

In connection with the nomination process, I have consulted with the U.S. Office of Government Ethics and the Federal Communication Commission's Designated Agency Ethics Official to identify potential conflicts of interest. If confirmed, any potential conflicts of interest will be resolved in accordance with the terms of the ethics agreement that I have entered into with the Commission's Designated Agency Ethics Official. I am not aware of any other potential conflicts of interest.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association, or other organization during your appointment? If so, please explain.

No

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated. Explain how you will resolve each potential conflict of interest.

In connection with the nomination process, I have consulted with the U.S. Office of Government Ethics and the Federal Communication Commission's Designated Agency Ethics Official to identify potential conflicts of interest. If confirmed, any potential conflicts of interest will be resolved in accordance with the terms of the ethics agreement that I have entered into with the Commission's Designated Agency Ethics Official. I am not aware of any other potential conflicts of interest.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated. Explain how you will resolve each potential conflict of interest.

In connection with the nomination process, I have consulted with the U.S. Office of Government Ethics and the Federal Communication Commission's Designated Agency Ethics Official to identify potential conflicts of interest. If confirmed, any potential conflicts of interest will be resolved in accordance with the terms of the ethics agreement that I have entered into with the Commission's Designated Agency Ethics Official. I am not aware of any other potential conflicts of interest.

5. Identify any other potential conflicts of interest, and explain how you will resolve each potential conflict of interest.

In connection with the nomination process, I have consulted with the U.S. Office of Government Ethics and the Federal Communication Commission's Designated Agency Ethics Official to identify potential conflicts of interest. If confirmed, any potential conflicts of interest will be resolved in accordance with the terms of the ethics agreement that I have entered into with the Commission's Designated Agency Ethics Official. I am not aware of any other potential conflicts of interest.

6. Describe any activity during the past ten years, including the names of clients represented, in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

In June 2022, I had one phone call with two Senators' personal staff on behalf of a wireless carrier regarding modifications to the "CCM Next Generation Telecommunications Act" draft bill. I am not a registered lobbyist and my conversation fell below the threshold for registered lobbying.

## C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, an Inspector General, professional association, disciplinary committee, or other professional group? If yes:

- a. Provide the name of court, agency, association, committee, or group;
- b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;
- c. Describe the citation, disciplinary action, complaint, or personnel action;
- d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain.

No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain.

No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain.

No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain.

No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination.

Not applicable.



#### **D. RELATIONSHIP WITH COMMITTEE**

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees, and that your department/agency endeavors to timely comply with requests for information from individual Members of Congress, including requests from members in the minority?

Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistleblowers from reprisal for their testimony and disclosures?

Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee?

Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so?


Yes.

**F. AFFIDAVIT**

Anna M. Gomez, being duly sworn, hereby states that he/she has read and signed the foregoing Statement on Biographical and Financial Information and that the information provided therein is, to the best of his/her knowledge, current, accurate, and complete.

  
\_\_\_\_\_  
Signature of Nominee

Subscribed and sworn before me this 31 day of MAY, 2023

  
\_\_\_\_\_  
Notary Public

KIAUNIA DENT  
NOTARY PUBLIC DISTRICT OF COLUMBIA  
www.kiauniadent.com



## Attachment A

ANNA M. GOMEZ



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### EXPERIENCE

#### U.S. Department of State

January 2023 – Present

*Senior Advisor for International Information and Communications Policy*

Leading U.S. preparations for the International Telecommunication Union World Radiocommunication Conference 2023 (WRC-23).

#### Retired

July 2022 – January 2023

- Advisory Board, US Ignite
- Advisory Board, Silicon Flatirons

#### Wiley Rein, LLP

2013–June 2022

*Partner*

Advised a broad cross-section of the industry on the business implications of regulatory policy and represents these entities before the Federal Communications Commission (FCC) and the administration on regulatory, policy, and transactional matters related to domestic and international telecommunications.

- Advised clients on regulatory obligations before the FCC, including before the International, Wireline Competition, Consumer and Government Affairs, and Wireless Bureaus.
- Counseled and analyzed U.S. and international regulation governing unmanned aircraft systems, including spectrum licensing and allocation matters before the FCC, the National and Telecommunications and Information Administration (NTIA), and the International Telecommunication Union (ITU).
- Advised clients on NTIA matters, including FirstNet, public safety communications, Internet policy, governance and domain names, and federal use of spectrum.

#### National Telecommunications and Information Administration, U.S. Department of Commerce

2009-2013

*Deputy Assistant Secretary for Communications and Information*

Developed and advocated communications and information policy on behalf of the Administration before the U.S. Congress, private industry, other Federal agencies, state and local governments, foreign governments, international organizations, and private organizations.

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Worked with White House offices on telecommunications and information policy issues. Developed consensus on Administration positions among multiple stakeholders. Oversaw NTIA's operations.

- Successfully oversaw NTIA's digital television transition program, ensuring that the number of unprepared households dropped from 6.7% to 0.5% by the transition date.
- Testified before Congress on digital television transition.
- Led efforts that resulted in a new \$7 billion public safety broadband network program housed within NTIA.
- Spoke domestically and internationally on behalf of the Administration, the Department of Commerce and NTIA via keynote speeches and remarks, including at APCO, CTIA, LULAC, MMTC, NAB, NALEO, NTCA, PCI, and SIA.
- Advocated for and led the establishment of the first NTIA Diversity and Inclusion Council.

**Sprint Nextel**

**2006-2009**

*Vice President, State and Federal Regulatory, Government Affairs*

Advocated on behalf of Sprint Nextel before state and federal government agencies regarding non-spectrum issues that affect the company's wireless and wireline assets. Advised the client on compliance with the Communications Act and state and federal rules and policies. Oversaw the Sprint Nextel state and federal regulatory groups.

- Crafted Sprint's strategy with regard to certain compensation for telephony traffic.
- Created a coalition of companies to advocate the FCC and Congress with regard to special access prices.

**International Bureau, Federal Communications Commission (FCC)**

**1999-2006**

*Deputy Chief*

Developed and implemented Commission policy on international telecommunications and satellite spectrum. Represented the Commission at international meetings. Assisted the Bureau Chief in leading 150+ employees to craft and implement the Bureau's strategic vision.

- Oversaw the development of numerous policies including the ancillary terrestrial rules for satellite carriers, the reform of the accounting rates system, and international mobile termination rates.
- Chaired the biennial review working group.
- Member, Interagency Task Force for Hispanic Employment.

**Office of Chairman William E. Kennard, FCC**

**Jul. 2000 – Feb. 2001**

*Senior Legal Advisor (Detail)*

Advised the Chairman on Common Carrier (telephony) matters. Ensured that the Chairman's agenda was implemented and that the Commission's processes ran smoothly.

- Coordinated policies including local competition, open access, and universal service.

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**Network Services Division, Common Carrier Bureau, FCC**  
*Chief and Deputy Chief*

**1997-1999**

Developed domestic telecommunications policy regarding local competition, access to telecommunications services, and protection of the fixed telephone network. Led a multi-disciplinary team of attorneys, engineers, economists, specialists, and support staff.

- Oversaw reform of Part 68 equipment registration rules and numbering administration.

**National Economic Council, White House**  
*Deputy Chief of Staff*

**1997**

Advised the Director regarding U.S. telecommunications policy and issues related to Hispanic education. Assisted with National Economic Council operations.

**Subcommittee on Communication, Committee on Commerce, Science and Transportation, U.S. Senate**

**1996-1997**

*Democratic Counsel*

Advised Senators and staff on domestic and international telecommunications policy, including foreign ownership restrictions, universal service, and liquor advertising.

**FCC**

**1994-1996**

*Counsel to the Chief, Common Carrier Bureau*  
*Attorney, Consumer Protection Division, Cable Services Bureau*

Reviewed orders for legal sufficiency and coordinated with other FCC Offices and Bureaus. Met with Commissioners' advisors to facilitate review and adoption of orders. Wrote and edited responses to Congressional inquiries.

- Served as Federal Staff Chair of the Federal-State Universal Service Joint Board.

**Arnold & Porter**

**1992-1994**

*Associate*

Prepared legal memoranda and portions of briefs on issues that included product liability, corporate compliance, administrative procedure, and legislation. Participated in discovery and other trial preparation functions.

- Coordinated mentoring program for Latino law students.

**EDUCATION**

J.D., National Law Center, George Washington University  
\* *Journal of International Law and Economics*

B.A., Pennsylvania State University  
\* *Cum Laude*

**RECOGNITION AND AWARDS**

- Penn State Alumni Fellows Award
- Association of Public Safety Communications Officials Leadership in Advancing Communications Policy Award
- Imagen Latina Leaders Award
  
- National Organization of Black Elected Legislative Women (NOBEL) Women Leaders in Technology Award
- Women in Cable Telecommunications Public Service Award
- FCBA Foundation Volunteer of the Year Award
- FCC Gold Medal
- FCC Chairman's Award

**OTHER**

- Conversational Spanish
- Hispanic Bar Association of D.C.
  - \* Former member of Board of Directors
- Federal Communications Bar Association
  - \* Former member of Executive Committee
  - \* Former member of Board of Federal Communications Bar Association Foundation
  - \* Former member of Nominations Committee
- Admitted to D.C. Bar
- Admitted to Maryland Bar (Inactive status)

## Attachment B

**List each book, article, column, letter to the editor, Internet blog posting, or other publication you have authored, individually or with others. Include a link to each publication when possible. If a link is not available, provide a digital copy of the publication when available.**

I have done my best to identify all books, articles, columns, letters to the editor, Internet blog postings, or other publications I have authored, either individually or with others, including through a thorough review of personal files and searches of publicly available electronic databases. Despite my searches, there may be other materials I have been unable to identify, find, or remember. I have located the following:

1. NTIA Blog, Spotlight on Commerce: Anna M. Gomez, Deputy Assistant Secretary for Communications and Information (September 28, 2011), <https://www.ntia.doc.gov/blog/2011/spotlight-commerce-anna-m-gomez-deputy-assistant-secretary-communications-and-information>
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3. NTIA Blog, The Critical Role Broadband Plays in Today's Economy (date unknown), [The Critical Role Broadband Plays in Today's Economy | BTOP / SBI Archived Grant Program \(doc.gov\)](#)
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## Attachment C

**List all speeches, panel discussions, and presentations (e.g., PowerPoint) that you have given on topics relevant to the position for which you have been nominated. Include a link to each publication when possible. If a link is not available, provide a digital copy of the speech or presentation when available.**

I have done my best to identify all speeches, panel discussions, and presentations that I have given on topics relevant to the position for which I have been nominated, including through a thorough review of personal files and searches of publicly available electronic databases. Despite my searches, there may be other materials I have been unable to identify, find, or remember. I have located the following:

Copies of remarks are available at Appendix A.

1. Telecommunications Regulatory Commission – Jordan, Professional Development Workshop, Dead Sea, Jordan, (March 24, 2004), remarks unavailable, <http://www.itu.int/ITU-D/treg/Events/Seminars/2004/Jordan/documents/ProfDevWshp.pdf> (remarks on universal service and enforcement)
2. University of Brasilia Law School Center on Law and Regulation, Brasilia, Brazil (2005), <http://www.docs.ndsr.org/docslidesConferenciaPerspectivasdasTelecomunicacoesnasAmericaseEuropa2005EUA.pdf>, presentation attached
3. Congressional Hispanic Caucus Institute Public Policy Conference, Washington, DC (2009), remarks unavailable (remarks on the effects of broadband on the Latino community)
4. Women’s Wireless Leadership Forum, Nashville, TN (2009), remarks unavailable <https://www.md7.com/2015/09/wwlf-promotes-the-exchange-of-ideas-and-information/> (remarks regarding my career and factors contributing to my success)
5. MMTC Access to Capital and Telecommunications Conference, Washington, DC, (July 21, 2009), remarks unavailable



6. PCIA Wireless Infrastructure Show, Nashville, TN (September 2009), remarks unavailable, <http://www.fiercewireless.com/wireless/ntia-to-begin-awarding-broadband-stimulus-grants-november> (remarks on NTIA broadband grants)
7. National Conference of Black Mayors Annual Convention, Las Vegas, NV (October 2009), remarks unavailable (I can't recall the subject of my remarks, but it likely was NTIA's broadband programs)
8. Family Online Safety Institute, Building a Culture of Responsibility from Online Safety to Digital Citizenship, Washington, DC (November 5, 2009), remarks unavailable, [file:///C:/Users/agomez/Downloads/2009 Annual Conference - Agenda.docx.pdf](file:///C:/Users/agomez/Downloads/2009%20Annual%20Conference%20-%20Agenda.docx.pdf) (remarks on broadband initiatives)
9. OECD Workshop on Common Challenges and Shared Solutions: Good Governance in Information Society Strategies, Madrid, Spain (November 18, 2009), remarks unavailable (remarks on the Obama Administration's strategy for the promotion of broadband)
10. Rainbow PUSH Coalition and Citizenship Education Fund Annual Media and Telecommunications Symposium, Washington, DC (November 20, 2009), remarks unavailable (remarks regarding innovative policies to spur deployment of broadband services to all Americans, and the broadband grants)
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15. New Media Entrepreneurship Conference, Washington, DC (May 6, 2010), remarks unavailable (I can't recall the subject of my remarks, they likely were about NTIA initiatives)
16. National Association for Latino Community Builders Building Wealth in American Communities: Colaboramos, Invertimos y Prosperamos, San Antonio, TX (August 12, 2010), remarks unavailable (remarks on broadband)
17. Congressional Hispanic Caucus Institute Public Policy Conference, Washington, DC (September 13, 2010), remarks unavailable (remarks on NTIA's efforts to address broadband adoption in the Hispanic community)
18. New Mexico Broadband and Smart Grid Summit, New Mexico (August 16, 2010), remarks unavailable (remarks regarding NTIA's broadband programs)
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20. State of the Mobile Net Conference, Washington, DC (April 21, 2010), remarks unavailable, <http://www.netcaucus.org/conference/2010/sotmn/agenda.shtml> (remarks on the disruptive pace of mobile net evolution)
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34. MMTC Broadband and Social Justice Policy Summit, Washington, DC (January 26, 2012), remarks unavailable (remarks regarding the Obama Administration's broadband agenda)
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37. A Public Safety Broadband Network Built To Last, Broomfield, CO (March 6, 2012) <https://www.ntia.doc.gov/speechtestimony/2012/remarks-deputy-assistant-secretary-gomez-pscr-demonstration-network-stakeholder>,  
<https://www.rmediagroup.com/News/NewsDetails/NewsID/8020>
38. Public Safety Communications & Electromagnetic Spectrum Auctions, Washington, DC (March 15, 2012), <https://www.ntia.doc.gov/other-publication/2012/public-safety-communications-electromagnetic-spectrum-auctions-slide-deck-pre>
39. EAGLE-Net Alliance Kickoff Event, Denver, CO (April 16, 2012), remarks unavailable,  
<http://archive.constantcontact.com/fs009/1104865671015/archive/1109594789842.html>
40. FCC Technical Advisory Board for First Responder Interoperability Workshop, Washington, DC (April 23, 2012), remarks unavailable (remarks on

recommendations for ensuring the interoperability of the nationwide public safety network)

41. National Association of Chief Information Officers Midyear Conference, Baltimore, MD (May 2012), remarks unavailable (I believe I spoke about FirstNet)
42. National League of Cities webinar, Building a Nationwide Public Safety Broadband Network: What Local Leaders Need to Know (June 6, 2012), remarks unavailable, <http://www.nlc.org/article/upcoming-webinar-building-a-nationwide-public-safety-broadband-network>
43. National Governors Association, Preparing for Public Safety Broadband, Leesburg, VA (June 29, 2012), <https://www.nga.org/cms/home/nga-center-for-best-practices/meeting--webcast-materials/page-hsps-meetings-webcasts/col2-content/main-content-list/preparing-for-public-safety-broadband.html> (remarks on FirstNet)
44. 2012 NCSL Legislative Summit, Chicago, IL (August 7, 2012), remarks unavailable, <http://www.ncsl.org/documents/standcomm/scomfc/CFILegislativeSummitAgenda12.pdf> (remarks on FirstNet)
45. MMTC Access to Capital and Telecommunications Policy Conference, Washington, DC (July 19, 2012), remarks unavailable (remarks regarding broadband grants)
46. Remarks by Deputy Assistant Secretary Gomez at the PLI/FCBA Telecommunications Policy & Regulation Institute, Washington, DC (December 14, 2012) [https://www.ntia.doc.gov/Remarks by Deputy Assistant Secretary Gomez at PLI/FCBA](https://www.ntia.doc.gov/Remarks%20by%20Deputy%20Assistant%20Secretary%20Gomez%20at%20PLI/FCBA)
47. MMTC Broadband and Social Justice Summit, Washington, DC (January 17, 2013), remarks unavailable, <http://mmtconline.org/bbsj-summit/speakers-2013/> (remarks on Obama Administration broadband programs and telecom policy)
48. Global Forum 2013: Driving the Digital Future: Opportunities for Citizens & Businesses, Trieste – Italy (October 28, 2013), remarks unavailable, <http://globalforum.items-int.com/global-forums/global-forum-2013-driving-the->

[digital-future-opportunities-for-citizens-businesses-trieste-italy/](#) (moderated opening keynote panel on Shaping our Digital Future)

49. Americas Spectrum Management Conference, Washington, DC (November 6, 2013), remarks unavailable, [https://eu-ems.com/agenda.asp?event\\_id=177&page\\_id=1470](https://eu-ems.com/agenda.asp?event_id=177&page_id=1470) (moderated panel on meeting the spectrum and smart cities)
50. Women's Emerging Issues Policy Forum Women's Digital Pathway Summit, Amelia Island, FL (January 25, 2014), remarks unavailable (remarks regarding broadband and Internet policy issues on which women have been leaders)
51. Silicon Flatirons, Digital Broadband Migration: After the Internet Protocol Revolution, Boulder, CO (February 9, 2014), remarks unavailable, <https://siliconflatirons.org/events/digital-broadband-migration-after-the-internet-protocol-revolution/>
52. Internet of Things Global Summit: Realizing the Potential of the IoT, Washington, DC, (October 28, 2014), remarks unavailable, [https://eu-ems.com/speakers.asp?event\\_id=221&page\\_id=1910](https://eu-ems.com/speakers.asp?event_id=221&page_id=1910)
53. Global Forum 2014, Geneva, Switzerland (November 17, 2014), notes attached
54. Silicon Flatirons, Boulder, CO (February 2015), notes from panel on institutional approaches and legal regimes to enable innovation attached
55. Wireless Infrastructure Show, Hollywood Florida (April 29, 2015), presentation on Unmanned Aircraft Systems attached
56. AUVSI Conference, Atlanta, GA (May 7, 2015), presentation on spectrum for Unmanned Aircraft Systems attached
57. Global Forum 2015, Oulu, Finland (September 28, 2015), remarks attached
58. FCBA, Washington, DC (November 16, 2015), presentation on spectrum for Unmanned Aircraft Systems attached
59. Fiber to the Home Council Webinar (February 2016), presentation on FirstNet attached

60. The Year Ahead in Drone Innovation, Washington, DC (March 16 2016), remarks unavailable, <https://itif.org/events/2016/03/16/year-ahead-drone-innovation> (remarks on unmanned aircraft regulations)
61. IWCE Expo, Las Vegas, NV (March 22, 2016), <https://www.rcrwireless.com/20160323/network-infrastructure/firstnet-rfp-opportunity-assessed-at-iwce-2016-tag6> (presentation attached)
62. Wireless Infrastructure Show, Dallas, TX (May 2016), presentation on the Internet of Things attached
63. National Homeland Security Conference, Tampa, FL (June 2016), presentation of Public Unmanned Aircraft Systems attached
64. Silicon Flatirons, Spectrum: Next Generation Interference Resolution and Enforcement, Boulder, CO (September 15, 2016), notes attached, <https://siliconflatirons.org/events/spectrum-next-generation-interference-resolution-and-enforcement/>, <https://siliconflatirons.org/wp-content/uploads/2016/12/Spectrum-Enforcement-Conference-Report.pdf>
65. FCC, Washington, DC (September 30, 2016), Hispanic Heritage Month remarks attached
66. IWCE Expo, Las Vegas, NV (March 31, 2017), <http://urgentcomm.com/public-safety-broadbandfirstnet/iwce-panel-preparation-key-states-making-good-opt-inopt-out-decision> (slides attached)
67. IWCE Expo, Las Vegas, NV (March 31, 2017), Aerial Communications presentation attached
68. FCBA Annual Seminar, Building Our Networks: Lessons Learned from Existing Broadband Investment Programs and Thoughts on Future Funding, Farmington, PA (May 5, 2017), remarks unavailable, <http://www.fcba.org/wp-content/uploads/2017/04/2017-Annual-Seminar-Agenda-4-4-17.pdf>
69. CLE Seminar: FirstNet: Developments, Challenges, and Opportunities in the Nationwide Public Safety Broadband Network, Washington, DC (May 18, 2017), <http://www.fcba.org/events/cle-seminar-firstnet-developments-challenges-opportunities-nationwide-public-safety-broadband-network/>, presentation unavailable

70. Wiley Connected Podcast, “A discussion on drone policy issues with DJI’s Brendan Schulman” (July 8, 2020), <https://soundcloud.com/wileyconnected/a-discussion-on-drone-tech-policy-issues-with-djis-brendan-schulman>
71. Wiley Connected Podcast, “UAS for First Responders & Enterprises: A Discussion with FirstiZ Founder Phil Burks” (June 30, 2020), <https://soundcloud.com/wileyconnected/uas-for-first-responders-enterprises-a-discussion-with-firstiz-founder-phil-burks>
72. Silicon Flatirons, Fireside Chat with NTIA Administrator Alan Davidson (February 21, 2023) <https://www.google.com/url?client=internal-element-cse&cx=016005321760733004813:ccotai7l2d0&q=https://www.colorado.edu/law/2023/02/21/silicon-flatirons-conference-explores-internets-midlife-crisis&sa=U&ved=2ahUKEwi9gdaFmOn9AhXIF1kFHQDrCG4QFnoECAMQAg&usg=AOvVaw3rZB0vHGbh08-QNrEb4ZZ>
73. Silicon Flatirons, 3D Wireless: The Promise and Challenges of Next-Generation Space and Airborne Wireless Systems (October 4, 2017) [3D Wireless: The Promise and Challenges of Next-Generation ...](#)
74. Federal Communications Bar Association panel, “Connecting Communities: Digital Equity & Closing the Digital Divide” (April 2, 2022), remarks unavailable
75. FCC Advisory Committee on Diversity and Digital Empowerment, Tech and Communications Diversity Opportunity Symposium and Virtual Fair (April 28, 2021) <https://www.fcc.gov/news-events/events/2021/04/tech-and-communications-diversity-opportunity-symposium-and-virtual-fair>
76. Federal Communications Bar Association, Celebrating International Girls in ICT Day Panel (April 22, 2021) <https://www.fcba.org/events/celebrating-international-girls-ict-day/>
77. Co-Moderator, Federal Communications Bar Association, Women’s History Month Fireside Chat with FCC, FTC, NTIA Government Leaders (March 29,



2021), remarks unavailable, <https://www.fcba.org/events/womens-history-month-fireside-chat-fcc-ftc-ntia-government-leaders/>

78. Welcoming Remarks, FCC Advisory Committee on Diversity and Digital Empowerment, Tech Startup Roundtable (March 24, 2021) <https://www.fcc.gov/news-events/events/2021/03/tech-startup-roundtable>
79. Federal Communications Bar Association, Fostering Equity, Inclusion and Equality in the Workplace Panel Discussion Panel (March 9, 2021), remarks unavailable, <https://www.fcba.org/events/artificial-intelligence-machine-learning-robotics-committee-lunch-learn-2/>
80. Chair, FCC Advisory Committee on Diversity and Digital Empowerment Meeting (June 24, 2021) <https://www.fcc.gov/news-events/events/2021/06/advisory-committee-diversity-and-digital-empowerment-june-2021>
81. Chair, Advisory Committee on Diversity and Digital Empowerment Meeting (February 11, 2021) <https://www.fcc.gov/news-events/events/2021/02/advisory-committee-diversity-and-digital-empowerment-february-2021>
82. Welcoming Remarks, FCC Advisory Committee on Diversity and Digital Empowerment Virtual Summit, “A Road Map to Tech Jobs” (January 15, 2021) <https://www.fcc.gov/news-events/events/2021/01/road-map-tech-jobs-virtual-summit>
83. Welcoming and Closing Remarks, FCC Advisory Committee on Diversity and Digital Empowerment Access to Capital Virtual Symposium, “Path to Media Ownership and Sustainability” (November 6, 2020) <https://www.fcc.gov/news-events/events/2020/11/path-media-ownership-and-sustainability-symposium-access-capital-small>
84. Welcoming Remarks, FCC Advisory Committee on Diversity and Digital Empowerment, Tech Supplier Diversity Opportunity Showcase (October 23, 2020) <https://www.fcc.gov/news-events/events/2020/10/tech-supplier-diversity-opportunity-showcase>

85. Chair, Advisory Committee on Diversity and Digital Empowerment Meeting (September 18, 2020) <https://www.fcc.gov/news-events/events/2020/09/advisory-committee-diversity-and-digital-empowerment-september-2020>
86. Introductory Remarks, FCC Advisory Committee on Diversity and Digital Empowerment, Tech Supplier Diversity Opportunity Showcase Workshop Examining the Role of Libraries on Broadband Adoption and Literacy (August 3, 2020) <https://www.fcc.gov/news-events/events/2020/08/workshop-examining-role-libraries-broadband-adoption-and-literacy>
87. Chair, Advisory Committee on Diversity and Digital Empowerment Meeting (September 18, 2020) <https://www.fcc.gov/news-events/events/2020/04/advisory-committee-diversity-and-digital-empowerment-april-2020>
88. Federal Communications Bar Association, Furthering U.S. Drone Operations: An Update on FAA and Spectrum Policy Developments (June 15, 2020), remarks unavailable, <https://www.fcba.org/events/cle-webinar-furthering-u-s-drone-operations-update-faa-spectrum-policy-developments/>
89. Chair, Advisory Committee on Diversity and Digital Empowerment Meeting (October 30, 2019) <https://www.fcc.gov/news-events/events/2019/10/advisory-committee-diversity-and-digital-empowerment-october-2019>
90. Chair, Advisory Committee on Diversity and Digital Empowerment Meeting (June 24, 2019) <https://www.fcc.gov/news-events/events/2019/06/advisory-committee-diversity-and-digital-empowerment-meeting-june-2019>
91. Federal Communications Bar Association Women’s Summit panel, “Diversity as a Leadership Priority” (January 29, 2020), remarks unavailable, <https://www.fcba.org/events/fcba-inaugural-womens-summit-january-29/>
92. Federal Communications Bar Association CLE: Drones, Safety and Security: How Federal, State and Local Agencies are Dealing with Current UAS

Challenges (April 22, 2019) <https://www.fcba.org/events/cle-drones-safety-security-federal-state-local-agencies-dealing-current-uas-challenges/>

93. Innovation and Access Working Group Workstream 1 Report before the Communications Equity and Diversity Council (February 23, 2022) <https://www.fcc.gov/news-events/events/2022/02/communications-equity-and-diversity-council-meeting-february-2022>
94. Fireside Chat with Ethan Lucarelli, Chief, FCC, Office of International Affairs (April 11, 2023) <https://www.fcc.gov/news-events/events/2023/04/launch-fcc-office-international-affairs-and-space-bureau>
95. Federal Communications Bar Association CLE: From the Difficult Clients to Government Service: What Do the Ethics Rules Require? (October 25, 2018), remarks unavailable, <https://www.fcba.org/events/cle-difficult-clients-government-service-ethics-rules-require/>
96. Federal Communications Bar Association CLE Seminar: FirstNet: Developments, Challenges, and Opportunities in the Nationwide Public Safety Broadband Network (May 18, 2018), remarks unavailable, <https://www.fcba.org/events/cle-seminar-firstnet-developments-challenges-opportunities-nationwide-public-safety-broadband-network/>
97. Federal Communications Bar Association, Diversity Committee Brown Bag Lunch Topic: New Administration, New Opportunities? (November 18, 2016), remarks unavailable, <https://www.fcba.org/events/3807/>
98. Federal Communications Bar Association CLE Seminar: The 20th Anniversary of the Telecommunications Act of 1996: A Review (February 16, 2016) <https://www.fcba.org/events/cle-seminar-the-20th-anniversary-of-the-telecommunications-act-of-1996-a-review/>

## Attachment D

**List all public statements you have made during the past ten years, including statements in news articles and radio and television appearances, which are on topics relevant to the position for which you have been nominated, including dates. Include a link to each statement when possible. If a link is not available, provide a digital copy of the statement when available.**

I have done my best to identify all public statements I have made over the past ten years, including statements in news articles and radio and television appearances, which are on topics relevant to the position for which I have been nominated, including through a thorough review of personal files and searches of publicly available electronic databases. Despite my searches, there may be other materials I have been unable to identify, find, or remember. I have located the following:

1. “Anna Gomez today said she was “honored” to be tapped to lead U.S. preparations for this year’s International Telecommunication Union’s World Radiocommunication Conference (WRC-23). She is expected to be head of the U.S. delegation for the event, according to sources.  
“I am honored to have this opportunity and eager to get to work,” Ms. Gomez said in a statement.” TR Daily, “Gomez ‘Honored’ to Be Tapped for WRC-23 Post” (Jan. 27, 2023) (link unavailable)
2. The FCC is unlikely to decide soon on the 5030-5091 MHz, the main band targeted for drones, Wiley's Anna Gomez told an Association for Unmanned Vehicle Systems International virtual conference Tuesday. The FCC hasn't provided clarity on whether flexible use licenses may be used, Gomez said. In 2019, the FCC sought comment (see 1912270039), per FAA Reauthorization Act Section 374. There's "a full record," yet no indication the FCC is "close" to an NPRM, said Gomez, who worked on the Joe Biden NTIA transition team. An FCC report to Congress last year said the band is likely suitable for UAS (see 2008280060). Communications Daily, “No FCC Quick Decision Seen on Dedicated Drone Spectrum” (May 5, 2021) (link unavailable)
3. “After the [Advisory Committee on Diversity and Digital Empowerment] was asked if the change in FCC leadership would affect recommendations, Chair Anna Gomez of Wiley said the panel has a "bipartisan mission," citing the support from all four commissioners.” Communications Daily, “ACDDE to

Seek FCC to Support Minority Tax Certificate, Help Libraries” (February 12, 2021) (link unavailable)

4. “Committee Chair Anna Gomez of Wiley Rein said Beasley is interested in meeting with representatives from local and regional banks to spread information about the broadcast business and study financing for new entrants. Beasley, who didn't attend the meeting, is interested in collaborating with other agencies such as Commerce Department's Minority Business Development Agency, Gomez said.” Communications Daily, “FCC Diversity Committee Plans to Examine Access to Capital, Diversity in Tech” (October 31, 2019) (link unavailable)
5. “Godfrey and Wiley Rein attorney Anna Gomez said 5G promises higher speeds and capacity and lower latency. . . . Gomez said densified small-cell networks needed local actions on zoning, permits and rights of way. . . . Gomez said the FCC tried to have broad stakeholder representation on its Broadband Deployment Advisory Committee, but it's difficult because localities are feeling under attack.” Communications Daily, “5G Coming 'Sooner Than People Thought,' Samsung Exec Says; Verizon Eyes 5-6 Cities This Year” (May 7, 2018) (link unavailable)
6. Urgent Communications, “FirstNet is delivering more than we imagined” (September 14, 2017) <https://urgentcomm.com/collections/firstnet-is-delivering-more-than-we-imagined/>
7. “Prospects for major infrastructure legislation are iffy at best, an FCBA conference heard Friday. . . . “I think there will be some type of plan. I think broadband will be in the plan,” said Wiley Rein attorney Anna Gomez, but she questioned whether there would be funding.” Communications Daily, “FCBA Panelists Circumspect to Gloomy About Chances for Major Infrastructure Initiative” (May 8, 2017) (link unavailable)
8. ““As the challenges of Internet-related policies continue to evolve and present themselves, it is critical to have a strong NTIA that can help the U.S. Government represent U.S. interests in setting productive policies that allow for continued innovation and growth in the global digital economy,” added Anna M. Gomez, Partner at Wiley Rein LLP and former Acting Administrator at NTIA.” US Official News, “Washington: #SubCommTech Examines NTIA's Reauthorization and its Role in the 21st Century” (February 2, 2017) (link unavailable)

9. “FirstNet's "independent authority" status puzzled even federal lawyers during the organization's early days—a fact noted at IWCE 2016 by Anna Gomez, who was NTIA's deputy assistant secretary for communications and information when FirstNet was created in 2012. "We had no idea [what the 'independent authority' description implied]," Gomez said during the "Evolution of FirstNet" workshop. "We thought 'independent authority' meant very independent. It took a lot of discussions with lawyers to figure out 'Well, it's not as independent as you might think.' "That was a little disappointing, to say the least. When we recruited the board members, we said, 'Oh, you'll be independent.' Some of them were less than happy when, eventually, we came back and said, 'Our lawyers are telling us that you still are a federal entity subject to generally applicable rules and regulations, other than where the statute specifically exempts you from those requirements." Urgent Communications, “Here's the aspect of FirstNet's independence that should matter most to public-safety agencies, potential offerors” (April 19, 2016)  
<https://urgentcomm.com/collections/heres-the-aspect-of-firstnets-independence-that-should-matter-most-to-public-safety-agencies-potential-offerors/>
10. ““While there has been interest from the wireless carriers, there are non-carriers who also are interested in being primary bidders; for example, some are interested in arbitraging the spectrum," said communications lawyer Anna Gomez of Wiley Rein. "Other vendors, such as system aggregators, are seriously looking at the opportunity." By setting up a request for proposals that covers all 56 states and territories, FirstNet "is encouraging bidders to partner with other companies, to provide an end-to-end product," Gomez told us. "Bidders will have to have a satellite component, a rural component, apps, devices, besides the traditional infrastructure. ... Lots of parties are talking to one another about potential bids.”” Communications Daily, “Verizon Seen as Unlikely to Pursue Partnership With FirstNet” (January 25, 2016) (link unavailable)
11. “Back when this was just a concept in the [Obama] administration’s mind, I think they did not foresee that it would take this long to get to where FirstNet is today,” Gomez said. “Then again, back when it was just a concept in the administration’s mind, the administration wanted FirstNet to be a federally chartered corporation, not an entity housed within a federal agency ... It would have been a non-profit [organization], and it would not have been subject to—for example—the federal-acquisition regulations.

“This was back before the statute was passed. The statute itself created what it called this independent authority housed within NTIA, and it took a long time to figure out what that really meant.”

Determining the nature of FirstNet, how it should operate and what type of oversight was appropriate proved to be a challenge, Gomez said.

“In time, all of the lawyers came to the conclusion that FirstNet was a federal entity subject to rules that are generally applicable to federal entities, except where the statute states otherwise,” she said. “Just coming to that conclusion took a long time, and I think that they’re still struggling with trying to figure out how to be an entrepreneurial entity that operates within the strictures of the federal government.”

“I always said this entity was sort of backwards in the way that it was created, although I can see why, in terms of it being a federal entity,” Gomez said. “Normally [with a corporate startup], you get one guy or two guys, they have an idea, they start to develop their idea, they shop it around, and they get some financing. Eventually, they might create a company, go public, and then they’ll get a board. All of that takes years; this isn’t something that’s done in a couple of months.

“When you think of it that way, they’re really on par with where a lot of major companies would be, except that it wouldn’t be quite so public. It wouldn’t be until they start getting financing or try to go public that you would see publicly that someone is trying to put a major entity together. But it is what it is, and FirstNet has had to do everything in a very open manner with a lot of expectations from stakeholders.”

“I was really happy to see them put in place a strong consultation process,” Gomez said. “I think one of their mistakes early on was not starting out with more consultation and more outreach. Hopefully, they have been able to respond to the criticism of that original time when they did not do more outreach and consultation.”

Some of the delays in outreach and consultation may have occurred because FirstNet board members were more focused on clarifying its legal standing as an independent authority under NTIA, but another problem was the lack of staffing in the early days, Gomez said.

“They should have opened the doors and started listening early on, but their instincts were, ‘No, let’s figure out what we need to do here, and then we’ll go out and talk to folks.’ But it’s easy to Monday-morning quarterback,” she said. “NTIA tried to provide as much support as it could, but NTIA’s also a very small organization. It was a lack of resources and them trying to get themselves in a place where they felt like they had something to talk about.”

. . . Gomez echoed this sentiment, noting that she is eagerly anticipating the release of the draft request for proposal (RFP) by the end of March and a final RFP as early as later this year.

“I really have a lot of confidence in [FirstNet Chairwoman] Sue Swenson and the staff that they have pulled together,” Gomez said. “So, I am pleased with the process, although—like everyone else—I’m anxious to see them start to get the RFPs out and really start deploying the network.”

“The one thing that I’m hoping is that they don’t become so cautious that they . . . slow the progress of the RFP. I’m anxious to see them move forward and partner with commercial providers in order to get the network deployed as quickly as possible.”

Urgent Communications, “Three years after its creation, it is time for FirstNet to begin making key decisions” (February 24, 2015), <https://urgentcomm.com/collections/three-years-after-its-creation-it-is-time-for-firstnet-to-begin-making-key-decisions/>.

12. “Anna Gomez, former acting administrator and now with Wiley Rein, told Dingell that NTIA staffers tend to be nimble and work well with other entities such as the Department of Transportation and state and local officials. . . . Gomez agreed NTIA would play a good role in coordinating, saying the executive branch would be the best coordinator. . . . Gomez said that “anything Congress can do to bolster NTIA’s position” among other agencies would help. . . . “In my experience, NTIA is a very resource-constrained agency” and its role “is only going to get bigger,” Gomez told Pallone, emphasizing the future spectrum needs in terms of staffing and research. . . . Gomez told Rep. Kevin Cramer, R-N.D., spectrum can be important for unmanned aerial systems for command and control, with different needs for different aircraft. Baker told lawmakers the Spectrum Relocation Fund should fund spectrum planning and lauded the quality of NTIA analysis, also commending Congress for helping prompt some of that.” Communications Daily, “Democrats Eye NTIA



Reauthorization as Vehicle for Spectrum, Vehicle-to-Infrastructure Proposals” (February 3, 2017) (link unavailable)

13. “Panelist Anna Gomez—a former NTIA official and now a partner in the law firm of Wiley Rein—estimated that it will take the FCC and the NTIA six months each to evaluate a state’s proposal under a “very aggressive” timetable. In other words, the opt-out state and its vendor could be in limbo for a year or more while waiting for approvals from the FCC and NTIA, with no assurance that either one will be granted.” Urgent Communications, “IWCE panel reveals steep hill to climb for states choosing opt-out route” (April 1, 2014) <https://urgentcomm.com/collections/iwce-panel-reveals-steep-hill-to-climb-for-states-choosing-opt-out-route/>
14. “After FirstNet presents a network plan to a state, the governor has 90 days to evaluate whether to opt in or opt out of the FirstNet system, according to Anna Gomez, a partner at the Washington, D.C.-based law firm of Wiley Rein. If the governor chooses to opt in, then FirstNet executes its deployment plans. If the governor chooses to have the state opt out, the state has 180 days to choose a vendor and deliver a plan to the FCC that demonstrates the state’s deployment will interoperate with the FirstNet system, according to the law that established FirstNet. If the FCC approves the state’s opt-out plan then the plan is submitted to the National Telecommunications and Information Administration (NTIA) which will decide whether the state will be allowed to use the FirstNet spectrum in the 700 MHz band, based on an evaluation of the interoperability and sustainability of the state’s proposal, Gomez said. Both the FCC and the NTIA likely will take at least six months to make their evaluations, meaning the winning vendor in an opt-out scenario could wait more than a year to begin work, she said. “If these very aggressive timelines are met, you would see the state move forward sometime in mid- to late-2017, and the same with FirstNet with deployments, if the timelines are met in this very aggressive time schedule,” Gomez said.” Urgent Communications, “IWCE panel: Preparation key to states making good opt-in/opt-out decision on FirstNet” (March 31, 2014) <https://urgentcomm.com/collections/iwce-panel-preparation-key-to-states-making-good-opt-in-opt-out-decision-on-firstnet/>
15. Interview published in Metropolitan Corporate Counsel, “Former Obama Administration And FCC Official Offers Insight Into Regulation's Impact On Innovation” (June 2013), <https://ccbjournal.com/articles/former-obama-administration-and-fcc-official-offers-insight-regulations-impact-innova>

16.IWCE Urgent Communications, IWCE 2016 Interview - Anna Gomez, Partner  
at Wiley Rein, LLP (April 19, 2016),  
<https://www.youtube.com/watch?v=r7g7G2zvgzw>

**Appendix A**  
**Digital copies of Presentations as Identified in Attachment C**

# Regulation for the Future

## *New Technologies and Convergence*

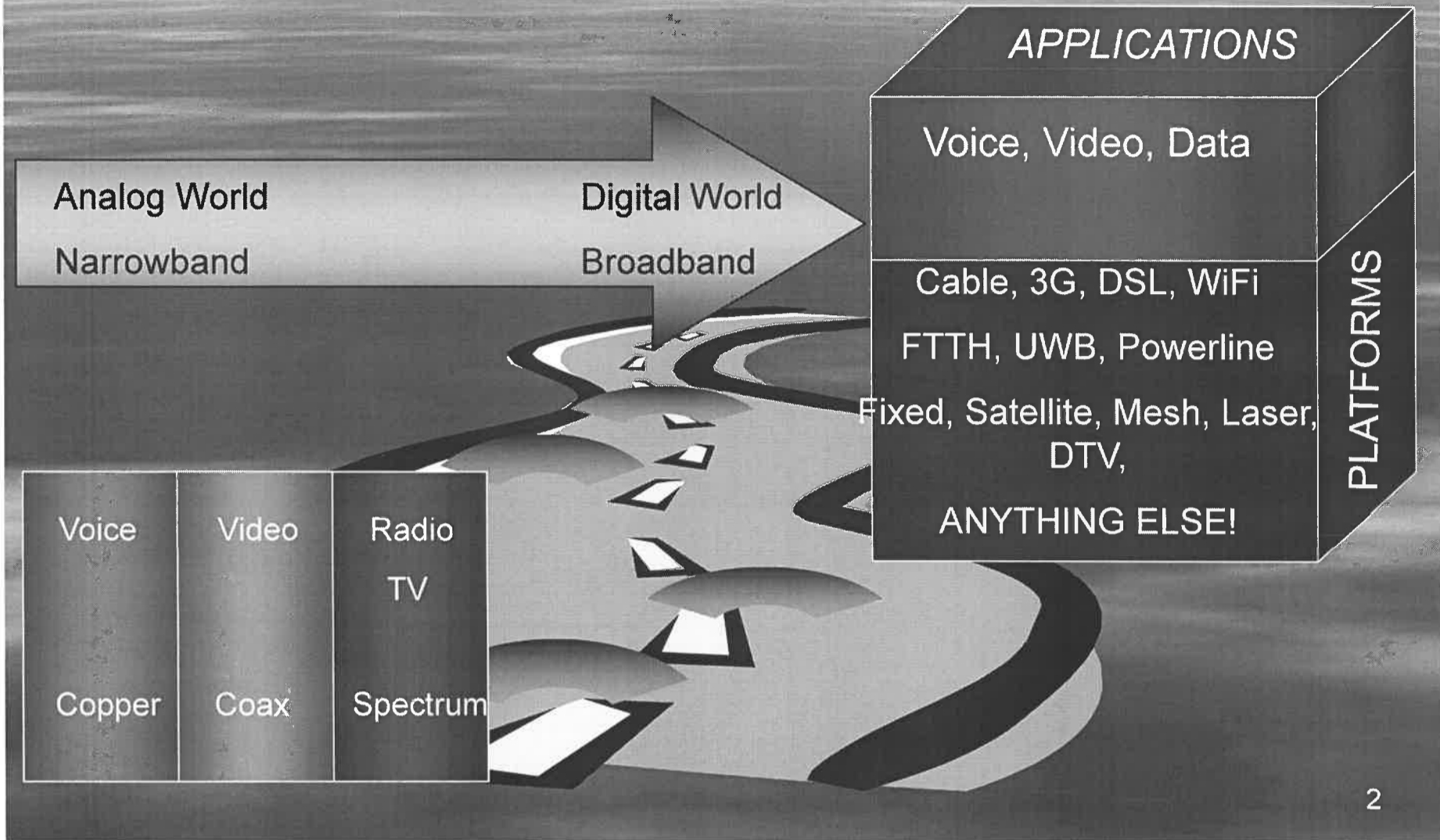
Anna Gomez

Deputy Chief, International Bureau  
Federal Communications Commission

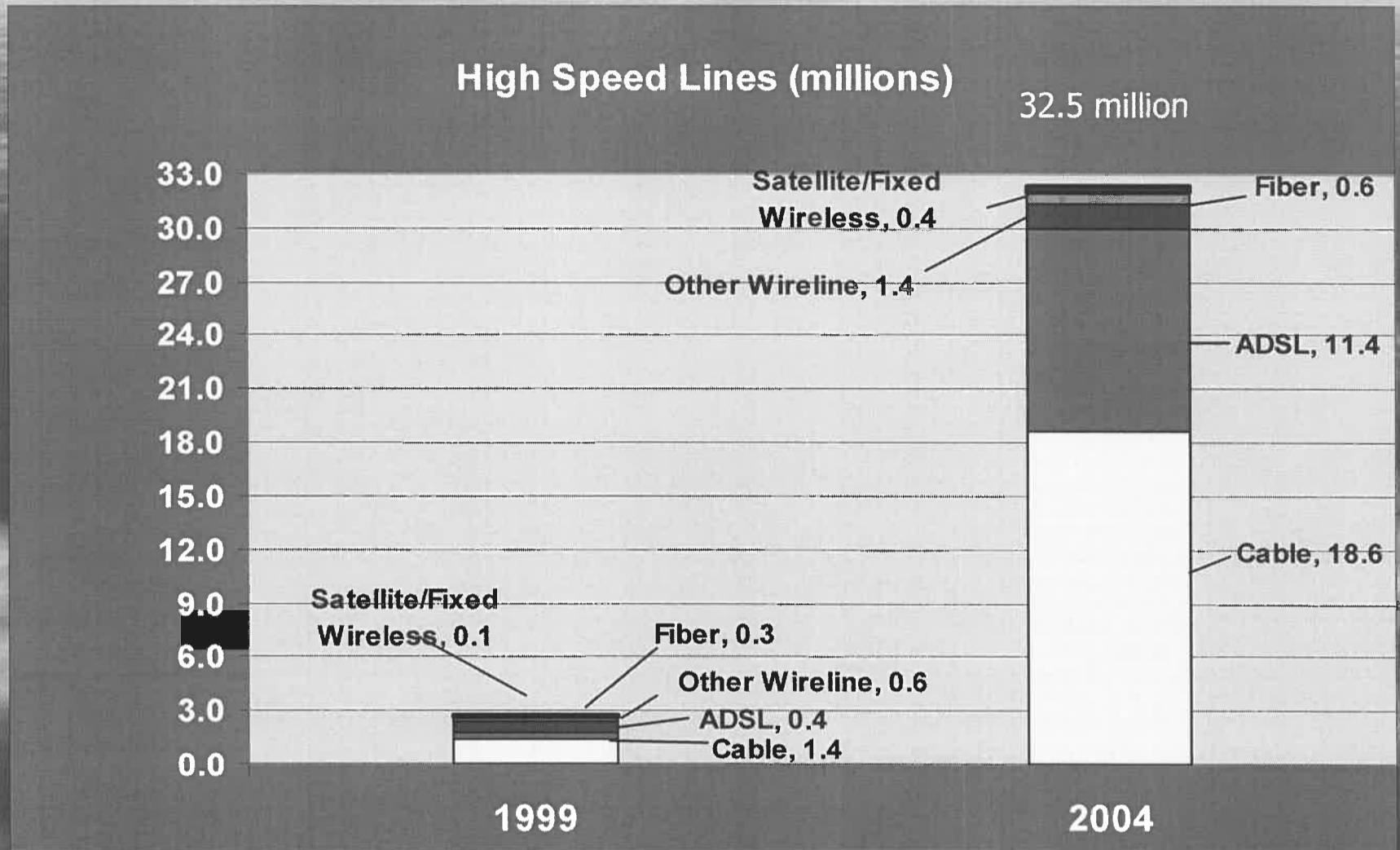


2

# Digital Migration



# High Speed Line Growth 1999-2004



Source: FCC's High Speed Services for Internet Access Report, 12/04

# Investment Growth

- **One out of three large corporations increased IT spending in 2003.**
- **Two out three will increase IT spending in 2005**
- **IT investment may generate 80% of the expected productivity growth through 2010.**

# Wireless Broadband Access Task Force Report Recommendations



- Promote voluntary frequency coordination
- Increase power limits for unlicensed devices
- Flexible policies
- Increase opportunities for dynamic sharing
- Pro-competitive, “light touch” regime



# Spectrum Policy Task Force

## Example of Innovation - Using "White Space"

- **FCC NPRM (ET Dockets 04-186, 02-380) adopted May 13, 2004**
- **Proposes add'l spectrum for unlicensed using "White Space" in TV Bands below 900 MHz**
- **Spectrum below 900 MHz is particularly well suited for penetrating buildings**

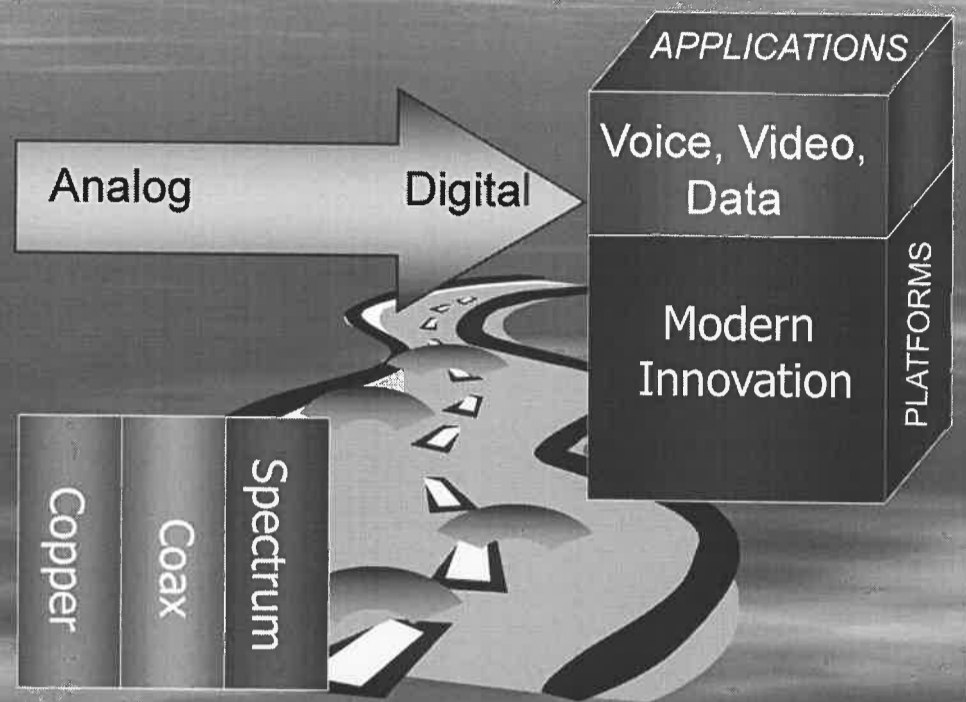


# A Light Touch

- 1996 U.S. Telecommunications Act
  - A national policy “to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services unfettered by Federal or State regulation.”

# Conclusion

- Change will continue to pull us along in the Digital Migration
- Key is minimal regulation
- We must create the kind of environment where these changes can flourish



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## NTIA to begin awarding broadband stimulus grants in November

by Phil Goldstein | Sep 22, 2009 2:29pm

NASHVILLE--The National National Telecommunications and Information Administration, along with the Department of Agriculture's Rural Utilities Service, is still sorting through nearly \$28 billion worth of applications for broadband stimulus grants--nearly seven times the \$4 billion available for the program in this first round. However, the NTIA hopes to begin awarding the first round of its grants in early November, according to an NTIA official.



Anna Gomez, NTIA's deputy administrator and deputy assistant secretary for communications and information, said in a keynote address at the PCIA Wireless Infrastructure show here that the agency hopes to have all of the grants announced by the end of the year. Later this fall, the agency will solicit comments on the first round of grants and gather best practices. Then, by late winter, the NTIA is to receive the second round of applications. Currently, the NTIA is deciding whether to combine the second round of applications with a third round, though Gomez emphasized that a decision had not been made either way.

Additionally, the NTIA is set to receive broadband mapping data from states by February, she said. The data will include deployment information, advertised speeds and types of service, she said, which will be used to identify where the greatest needs are for broadband in unserved and underserved areas. By February 2011, the NTIA is expected to have an interactive, national broadband map in place.

"I think our biggest challenge is because this a Recovery Act program, we want to be able to get the grants given so that you can have the stimulative effects of the grants," she said in an interview with *FierceWireless*. "You want the job creation, you want the building of the infrastructure, you want the economy to be positively affected by the issuance of these monies. And so we want to get this program up and running as quickly as possible, while at the same time making sure that we are very careful not to have waste, fraud and abuse, and comply with the various requirements of the statute."

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## Steve Blum's Blog

Management, planning and business development  
consulting for community broadband

### Broadband stimulus grant update: first round still under review, second round likely to slip a bit

07 January 2010



Anna Gomez, deputy assistant secretary for communications and information at NTIA (National Telecommunications and Information Administration), spoke at today's Tech Policy Summit at the Consumer Electronics Show in Las Vegas.

She repeated previous agency comments about wanting to "get it done fast, get it done right and with the greatest effect possible."

She described the Broadband Technology Opportunities Program (BTOP) as "unprecedented" at the NTIA.

Lessons learned in a difficult first round would be applied in the second round. Among those lessons is a better understanding of what sort of projects should take priority for BTOP funding.



Secretary Gomez speaks to reporters at 2010 Consumer Electronics Show

Her comments regarding the program's time line were:

- The notice of funding availability (NOFA) for the second round will be released in a "few weeks". She wouldn't say if that means the previous target of mid-January would slip, although she left room for thinking it will.
- The first round grants will be completed "on a rolling basis over the next two months."
- All grants will be made by Congress' mandated deadline of 30 September 2010.
- In separate comments, Karen Jackson from the Commonwealth of Virginia's Technology Office, confirmed that there will be at least a 60 day window for second round applications, rather than the original 45 day deadline in the first round.

I spoke with Secretary Gomez afterward about some of the nuances of the application review time line and progress to date. She couldn't provide much else in the way of details, although the inference was that the first review stage for the first round BTOP (broadband technology opportunities program) applications is still ongoing, and that not all of the projects that will advance to the second, due diligence stage of review have been selected.

She did say "our goal is to make sure people know their status in time to file in the second round." Asked whether first round applicants could be in the position of having to simultaneously prepare a second round application and follow up on a first round application, she said "hopefully not."

Connecting the dots, here's my take:

- The second round NOFA will be released around the end of January, maybe even as late as the first or second week of February.
- If a first round application hasn't advanced to the second stage of review by the end of the month, it won't.
- The second round NOFA will be more specific about program goals, be structured to encourage cooperation amongst applicants, and favor projects that include significant, shared middle mile infrastructure, with or without last mile facilities.
- NTIA has a much better understanding now of how to run the program and what its goals should be. Don't be surprised if the first round falls significantly short of its \$4 billion target, with unspent funds redirected to specific program goals in the second round.

Secretary Gomez also announced a new program, available at [match.broadbandusa.gov](http://match.broadbandusa.gov), called Broadband Match. It's an online tool that is supposed to "facilitate partnerships among prospective applicants for a grant." She said the idea is to further NTIA head Larry Strickling's goal for the next round of favoring public/private partnerships that take a "comprehensive view" of communities.

She said that they want to ensure that key community members – meaning anchor institutions and government agencies – can access middle mile projects directly and that private companies can make use of it to create last mile services that reach consumers and businesses.

The emphasis in the second round will clearly be on middle mile projects. Gomez spotlighted the grant made to such a project in Georgia last month as an excellent example of what they'll be looking for in the second round. The objective of the Broadband Match program is to ensure that public/private groups "can put together the most comprehensive application possible."

Talking Points for  
ASSISTANT SECRETARY ANNA GOMEZ  
COMMERCE SPECTRUM MANAGEMENT ADVISORY COMMITTEE

MEETING

March 4, 2010, 9:00 am  
HCHB 4830

- It is my pleasure to welcome you again to the Department of Commerce for this meeting of the Commerce Spectrum Management Advisory Committee. Our Assistant Secretary, Larry Strickling, is unable to attend today because he is testifying to Congress. He sends his best regards to all of you.
- I want to thank outset our co-chairs, Dale Hatfield and Bryan Tramont, and all of the members, for your extraordinary commitments of time and energy to this committee. I know you have been exceptionally active and have worked hard within your subcommittees to define issues and produce draft reports.
- Today, good spectrum policy is more important than ever. We can't rest on our laurels. We are weeks away from release of the National Broadband plan. It is more and more apparent that good spectrum policy is a foundation to a good broadband policy.
- New and more efficiently used spectrum can make a significant contribution to a more competitive broadband Internet access marketplace. Research and development can lead to innovative new spectrum access technologies, and these can spur a new round of innovation that will increase domestic spectrum efficiency through sharing and opportunistic use. If there is one thing we know about spectrum, is that there is increasing scarcity in the "beachfront" locations. If we are to get better at expanding the availability and affordability of broadband, we need to get better at sharing – between federal users, between commercial users, and between federal and commercial users. We need your expert advice in addressing this issue
- The reports you are working on for discussion at today's meeting and future sessions – on spectrum inventory, transparency, adjacent band interference and dynamic spectrum access, and incentives, will lead the way in spectrum management. This is why I emphasize the need for you to be specific as to the actions NTIA can take to implement your recommendations.
- And the work is just beginning, as you further define and explore these issues in your future work and advice to NTIA.
- Thank you all again for being here today. With that, I'd like to turn this meeting back over to our co-chairs, Dale and Bryan.



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## NTIA official provides timelines for nationwide broadband network

*Urgent Communications*

Donny Jackson

Donny Jackson (donald.jackson@penton.com)

Tue, 2012-03-20 11:07

It could be at least a year before construction on the nationwide, 700 MHz LTE network for public safety begins, because the governance and planning work for the massive project must be completed first, according to an official for the [National Telecommunications and Information Administration \(NTIA\)](#).

NTIA has until Aug. 20 to establish the [First Responder Network Authority \(FirstNet\)](#), the 15-member board that will make policy decisions regarding the public-safety broadband network, said Anna Gomez, NTIA's deputy assistant secretary, during last week's [Urgent Communications](#) webinar sponsored by [Cassidian Communications](#). After FirstNet is created, it has to create a public-safety advisory committee, establish resources, develop a request for inquiry (RFI) and consult with designated agents for each state before releasing a request for proposal (RFP).

The new law does not stipulate a time frame for the RFP process, but Gomez said NTIA plans to "move full-speed ahead" with the tasks — although she does not believe this step can be completed quickly.

"It's a pretty good guess that it's going to take several months," Gomez said during the webinar, an archive of which is [available here](#).

After the RFP is released, governors will have 90 days to accept the plan or choose to opt out of the nationwide buildout to plan construction of the LTE network in their states. While this is an option, states choosing to opt out of the nationwide plan must submit their own plan within six months and get FCC approval before they can begin construction. In addition, they will have to provide a 20% match to federal funds for the deployment — operational expenses will not be covered — something that will not be required of states following the FirstNet plan.

When asked whether states choosing to opt out of the nationwide plan will pay more and see a deployment delay, Gomez said, "I would say that's not unlikely."

Of course, the first deployments in this private LTE network are expected to be completed this year, as several 700 MHz waiver recipients are scheduled to build out 700 MHz broadband systems with federal stimulus grant money. [Public Safety Spectrum Trust \(PSST\)](#) Chairman Harlin McEwen said he has been working with the FCC and NTIA to ensure a smooth transition of the public-safety broadband license from the PSST to FirstNet.

McEwen said he believes it is “very unlikely” that the FCC will approve any new 700 MHz broadband waivers before the license is transferred to FirstNet.

Perhaps the most controversial portion of the new law is a requirement that public-safety entities must vacate the T-Band spectrum in the 470-512 MHz range. Mobile wireless consultant [Andrew Seybold](#) emphasized that the key for agencies operating on this spectrum is “don’t panic.”

Public-safety officials are trying to convince the FCC to waive the narrowbanding mandate for T-Band agencies, in part because the purpose of narrowbanding — clearing additional spectrum for public safety to use — would not happen in the T-Band, Seybold said. But a more important reason that T-Band agencies should not narrowband is to ensure that scarce financial resources are used most efficiently — in this case, to help pay for the buildout of a LTE network, according to Charles Dowd, deputy chief for the New York City Police Department.

“Why would we want to invest \$100 million to \$200 million to narrowband a UHF T-Band system, if the spectrum is going to be taken away from us at some point?” Dowd said. “Unless your system is at its end of life, the idea of just narrowbanding it for the sake of narrowbanding — to us — doesn’t make a lot of sense.”

#### Related stories

- [Commentary: Nationwide network has public safety scrambling for answers](#)
- [Commentary: New public-safety network is story like no other](#)
- [PSA celebrates broadband-network victory](#)
- [GAO: Mission-critical voice over broadband not in the near future](#)
- [NYPD: New T-band rules should alter FCC's narrowbanding mandate](#)

**Source URL:** <http://urgentcomm.com/networks-amp-systems-news/ntta-official-provides-timelines-nationwide-broadband-network>

## Global Forum 2014

Welcome to the keynote opening session,...

I am Anna Gomez, a partner at the law firm of Wiley Rein, where I specialize in advising clients regarding domestic and international telecommunications as well as on issues surrounding new and expanding uses of unmanned aircraft systems.

The digital transformation of global economies continues at breathtaking speed. Since we spoke last year the digital economy – and regulatory policies -- have continued to grow and evolve. Bit topics this year were Big Data, Internationalization of the Internet, unmanned aircraft, driverless cars, almost daily Cybersecurity breaches, the Internet of Things, high speed broadband, disruptive sharing economy apps. I'm not even going to mention Net Neutrality!

Economic imperatives of cost reduction and globalization are driving business decisions, while regulators are focusing on setting and enforcing rules of the road that allow innovation to flourish while protecting privacy and data, driving innovation and investment in their own economies, and freeing up spectrum for the many mobile uses in the digital economy.

Last year I gave you some quick forecasts of what's to come, I thought I would update them this year:

- While in 1992 there were about as many devices connected to the Internet as there are people living in San Jose California, today there are more connected devices than there are human beings in the planet.
- The global Internet of Things market will grow from about \$2 trillion to \$7.1 trillion by 2020.

- But today about 90 % of all IoT devices are being installed in the world's developed regions
    - By 2020 we'll have up to 26 billion individual devices worldwide
  - The US Market for unmanned aircraft systems will grow from \$5 billion in 2013 to \$15 billion in 2020. The global market for consumer UAS will exceed \$1 Billion in the next five years.
  - By 2018, 62 percent of new cars sold worldwide will have embedded Internet connectivity.
  - By 2020, 4 of five smartphone connections worldwide will come from the developing world.
- With so much connectivity also comes challenges.
- How do we ensure universal broadband connectivity?
  - How can policymakers set the tone to allow innovators to enter – and as Gary will discuss – disrupt the market?

- How do we allocate spectrum to meet consumers' – and innovators -- thirst for bandwidth?
- How can policymakers create an environment conducive to the take-up of cloud services that address users' concerns about privacy and security?
- Who should govern the internet and how?

We have a very distinguished panel, which will provide us some interesting perspectives on these and other issues in their respective areas of the world.

Since we want to make sure we have sufficient time for dialogue, I do not plan to review each of our speakers' many accomplishments. So please refer to their bios, which were provided in your packets.

We begin with the Chair of the Session, Mr. Roberto Viola, who is the Deputy Director General of the European Commission Directorate General for Communications Networks, Content and Technology. Chair Viola,

[Mr. Viola speaks]

Gary Shapiro has kindly agreed to set the scene for our panel.

Gary is the President and CEO of the Consumer Electronics Association. Gary?

Our next speaker is Jorgen Abild Andersen, who is Chairman of the OECD's Committee on Digital Economy Policy  
[Jorgen speaks]

Our next speaker is Michel Ching Chong Lu, Representative of the Taipei Representative Office in France. Representative Lu,

[Rep. Lu speaks]

Our next Speaker is Theresa Swineheart, who is Senior Advisor to the President on Global Strategy at ICANN (the Internet Corporation for Assigned Names and Numbers).

- You were just in Kore for the Plenipotentiary conference.

How did that go?

Our next speaker is Dr. Willie Lu, co-founder of Technaut Intellectual Ventures and Chief Inventor and Father of the



Open Wireless and mobile cloud platform for mobile devices.

Dr. Lu,

- Why is the Mobile Cloud is largely different from Cloud Computing?

**Qs:**

- 1. Policymakers around the world face many challenges in this connected age of responding to disruptive innovators in today's digital economy. Do disruptive innovators present a dilemma or an opportunity, and how do you each see your organizations responding to them?**
- 2. For Mr. Viola - Incoming European Commission President Juncker has had a great focus on the importance of digital market. Can you tell us what will be the policy direction under the new Commission?**
- 3. While the Internet of Things, and its M2M subset, have exploded in some economies, in others the lack of broadband deployment has significantly hampered large scale deployment, creating a new kind of digital divide. According to a recent GSMA report on M2M, M2M accounts for 1 in 10 of all mobile connections in the U.S., in contrast to one in 20 in Europe and one in**

- 100 in Africa. What can policymakers – and entrepreneurs – do to ameliorate this divide?
4. How can policymakers appropriately balance allowing innovation to flourish while protecting consumers and ensuring appropriate infrastructure deployment?
5. ICANN and its stakeholders are discussing the proposed undertaking the internationalization of the Internet. Numerous issues are being addressed as we proceed, one of those being accountability. ICANN and its stakeholders have recognized, however, that it is important to ensure inclusion in the discussion of those parts of the world that have not been active in ICANN. How is that progressing and what can be done to further address the concerns of those who have not traditionally been part of the ICANN process?
6. As we are looking at transparency, accountability, governance structures for all stakeholders in ensuring connected age, where does one look at accountability and transparency of respective parties? Where are the checks and balances that allow for continued innovation but ensure responsibilities lie where they need to lie? Even with the cloud and the internet of things – at which point is it the responsibility of the producer of the “thing” (such as a smart refrigerator) -- as opposed to the user -- to secure the information?
7. Unmanned aircraft systems are growing in popularity not just among hobbyists, but also for commercial and public safety uses. Amazon would like to use

them to deliver packages, the motion picture industry and news organizations for filming, Facebook to provide internet access in unserved regions, even farmers are interested in them for monitoring their crops. From the public safety perspective, UAS have been used to film post-disasters in order to provide a quicker, more targeted response. What are the opportunities for unmanned aircraft and what stands in the way of more widespread deployment?

8. Today's connected users are made up primarily of users who are familiar with not having a connected age. With that come issues of trust, but also an awareness that security needs to be a concern (even if we don't know exactly how to ensure it). How do we secure the environment for a generation of users that don't know anything but a connected age?

a. Willie – why are wireless optimization and mobile cybersecurity critical issues in the mobile cloud?

b. How do we develop secured and converged terrestrial and airborne networks based on the commercial mobile cloud platform?

SILICON FLATIRONS  
February 2015

- Good morning
- This session will explore what institutional approaches and legal regimes are most effective to enable innovation while ensuring ...
- This panel is very timely, as we have seen a significant shift in regulatory philosophy in the current FCC and FTC.

Three very different topics that explore, by turns,

- the play of economic productivity and democratic egalitarianism goals in communications regulation;
- how different modes of technology regulation balance effectiveness against regulatory agility/modesty; and
- the need to revamp intellectual property rights to shift more of the social costs of IP monopolies to the monopolists.

The discussants will take up each of the papers on their own.

Preliminary questions:

- All the papers deal in some way with the power/stickiness of default rules, but also have a lot faith in the dynamism of stakeholders (including policymakers, regulated entities, and rights holders).
  - What are the default rules that should worry us most or that we should most value in the pursuit of optimal policy outcomes?
- Your proposed governance regimes depend on particular conceptions of innovation.
  - What if these models are wrong or the processes of innovation change radically?
  - How do your favored governance regimes adapt?
  - How can they tell that adaptation is necessary?
  - And given the stickiness of default rules, will adaptation be rapid enough?
  - How important is the ability to adapt and change in the assessment of a governance regime and what are the costs of flexibility?
- Your proposed governance regimes all depend on at least Congressional (and judicial) inaction, leaving the agency lots of leeway, and at most ambitious legislative action. We seem to be living in a period in which ambitious legislative action is impossible.
  - Should governance regimes be designed with this in mind?
  - What does legislative benign (at best) neglect mean for your proposals?
  - How can versions of them be implemented despite or even exploiting dysfunctional government?
- All the papers in one way or another envision ex ante decision-making as a way to foster

virtuous cycles of innovation, reduce moral hazard, time intervention for optimal impact.

- What are the costs (e.g., getting it wrong) and benefits (e.g., clarity) of putting more weight on ex ante judgments about how markets and technologies will play out?
  - Where do you think we need to develop more robust ex post adjudication and enforcement?
  - How do the stakeholders line up on the ex-ante/ex post spectrum (or binary)?
- What are the collective action/political economy problems in realizing your governance proposals and what can be done?
  - Ask a question about big data.
  - Ask a question about drones – Howard Shelanski
  - Looking at slide 7 of Mark Cooper's presentation (pasted below) – does the current broadband Internet access market reflect the virtuous cycle building blocks, and where might there be failures that require regulatory intervention?

### **Building Blocks of the Virtuous Cycle**

#### Micro-Level

- User driven to an unprecedented degree
- Importance of platforms
- New relationship to capital markets
- Dramatic increases in entry
- Voluntary, Multi-stakeholder management of Open Standards

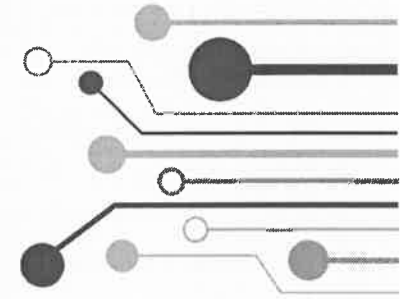
#### Autonomously Generated, Sector-Specific Externalities

- Expanded division of labor
- Divided and diverse technical platform leadership
- Specialization of supply firms
- Network effects
- Knowledge flows
- Learning externalities

- Howard Shelanski: You have had a highly varied experience with regulatory regimes and institutions, having served at the FCC, FTC and now at OIRA. What has been your experience with what works – and conversely doesn't work – to enable innovation while protecting the public interest?
- Mark posits that the best way to secure the future is to understand the ingredients of past success. To what past successes would you point and what were the ingredients for those past successes?



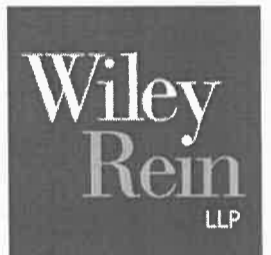
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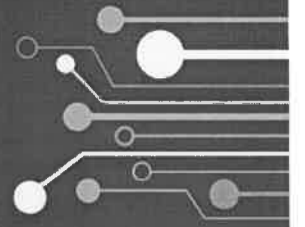
# The Regulatory Framework for Examining Opportunities and Challenges of UAS

Presented by:

Anna M. Gomez  
Wiley Rein, LLP

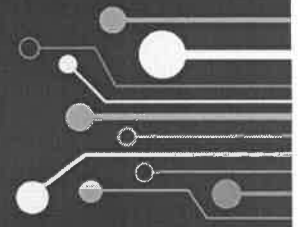


SS



- **Current Regulatory Landscape**
- **FAA Actions**
  - FAA Notice of Proposed Rulemaking on Small UAS
  - FAA Test Sites
  - Section 333 Exemptions
- **Privacy**
  - NTIA Privacy Multi-Stakeholder Process

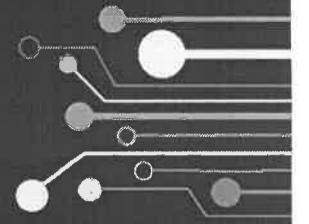
## Background: sUAS



- Unmanned aircraft with payload capabilities
  - Under 55 pounds
  - Cost ranging from \$1,000 to \$20,000 each
  - Flying at altitudes below 400 feet AGL
  - Maximum speeds of 30 mph to 50 mph
  - 30 to 40 minute flight time
  - Visual line of sight operations

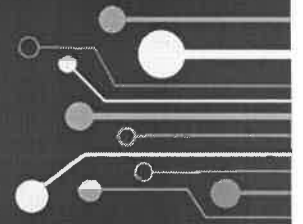


## Current Regulatory Landscape



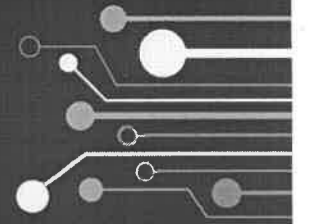
- Hobbyists can fly
- Operators of a “public aircraft” can fly with FAA permission
- Commercial users can obtain a grant of exemption under Section 333 to fly
- Operators with Special Airworthiness Certificates in the Experimental Category can fly for R&D purposes

# FAA Notice of Proposed Rulemaking on Small UAS



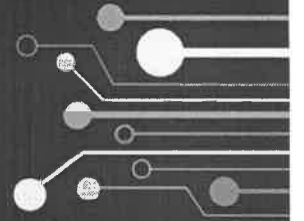
- Operational Limitations:
  - Weight under 55 lbs
  - Daylight and visual line of sight operations
  - May not operate over any persons not directly involved with operations
  - Yield right of way to other aircraft
  - Visual observer not required
  - Maximum airspeed 100 mph
  - Maximum altitude 500 feet AGL
  - No careless or reckless operations

# FAA Notice of Proposed Rulemaking on Small UAS (cont'd)



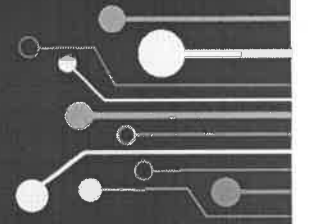
- Operator certification and responsibilities
  - Pass an initial aeronautical knowledge test at an FAA-approved knowledge testing center.
  - Recurrent test every two years
  - Vetted by TSA
  - Be at least 17 years old
  - Report accidents to the FAA within 10 days of any operation that results in injury or property damage
  - Conduct preflight inspection

## FAA Notice of Proposed Rulemaking on Small UAS (cont'd)



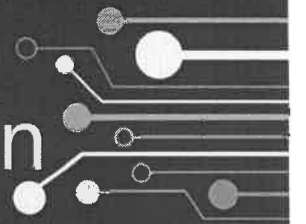
- Proposed rule excludes UAS conducting external load operations and towing aircraft or objects
- “Micro” UAS proposal - additional, more flexible framework for UAS under 4.4 pounds
- Final rules could take until late 2016 or 2017

## Section 333 Exemptions



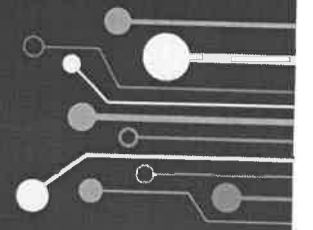
- The Secretary of Transportation may determine under Section 333 of the FAA Modernization and Reform Act of 2012 that:
  - Certain UAS as a result of their size, weight, speed, operational capability, proximity to airports and populated areas, and operation within visual line of sight do not create a hazard to users of the National Airspace System (NAS) or the public or pose a threat to national security.

## Basic Minimum Showings for an Exemption



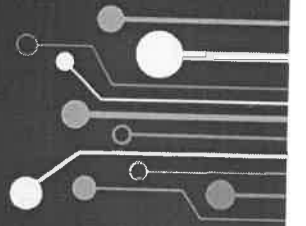
- UAS weigh less than 55 pounds
- Maximum altitude of 400 feet AGL
- Restricted to line of sight operation
- Licensed pilot and an observer
- Maintain minimum distances from airports
- Not operate over people or populated areas
- Procedures to give way to manned aircraft
- Safety systems for aircraft failure or radio link loss

# Exemptions Granted



- The FAA has granted 224\* exemptions
  - Closed-set filming
  - Aerial imaging and surveying
  - Flare stack inspection
  - Real estate photography
  - Agricultural purposes
  - Bridge and utility inspections and monitoring
  - Roof inspections

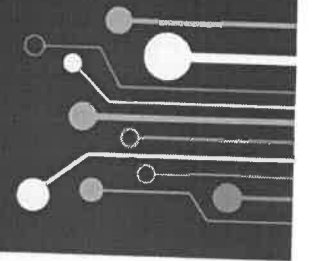
\* As of April 24, 2015



- No federal rules or laws specifically address sUAS privacy
- States have passed bills and laws regulating UAS privacy and surveillance
- February Presidential Memorandum directs NTIA to establish a multi-stakeholder process to develop privacy, accountability, and transparency best practices
  - “Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems”

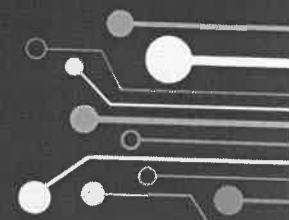


# NTIA Privacy Multi-Stakeholder Process



- NTIA convenes the meetings of stakeholders to develop consensus best practices
  - Meetings are open to any person or organization that wishes to participate
    - Meetings are webcast
  - NTIA will establish agenda, but not direct outcomes
    - NTIA likely will establish working groups
  - No definitive timeline or deadline
- NTIA will announce the first meeting soon

# Questions?



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**Michael Lewis**

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## **Flying Free and Far: the Spectrum Piece of the BVLOS Puzzle**

*Presented by:*

R. Michael Senkowski  
Anna M. Gomez

Katy M. Ross

May 7, 2015

*These slides are accompanied by an oral presentation and should not be relied upon as legal advice.*  
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# Overview

- Spectrum Management Overview
- UAS Spectrum: How Much
- UAS Spectrum: What We Have
- UAS Spectrum: How to Get Access
- UAS Spectrum: How to Get More
- UAS Spectrum: Things to Consider Doing



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# Spectrum Management Overview

- The allocation of radio spectrum is a highly regulated practice involving global, regional, and domestic regulatory bodies
- Allocations are made to specific classes of services (*e.g.* aeronautical mobile, fixed satellite, commercial mobile radio, *etc.*)
  - UAS typically would operate in spectrum allocated for aeronautical mobile service

# Spectrum Management Overview

- Globally, the International Telecommunication Union (ITU) establishes rules and policies for radio spectrum use to prevent cross-border interference.
  - The ITU is a United Nations specialized organization
  - World Radio Conferences (WRCs) are held every 3-4 years to review spectrum policies
  - Countries may adjust international allocations to satisfy domestic needs provided that no cross-border interference is created
  
- The U.S. bifurcates its management of spectrum
  - The FCC oversees commercial and civil use (*i.e.*, state and local government)
  - National Telecommunications and Information Administration (NTIA) regulates Federal government use of spectrum



# UNITED STATES FREQUENCY ALLOCATIONS THE RADIO SPECTRUM

**RADIO SERVICES (COLOR LEGEND)**

Mobile service	Fixed service	Mobile-satellite service
Land mobile service	Fixed-satellite service	Mobile-satellite service - mobile
Land mobile service - mobile	Fixed-satellite service - mobile	Mobile-satellite service - fixed
Land mobile service - fixed	Fixed-satellite service - fixed	Mobile-satellite service - mobile-satellite
Land mobile service - mobile-satellite	Fixed-satellite service - mobile-satellite	Mobile-satellite service - mobile-satellite
Land mobile service - mobile-satellite	Fixed-satellite service - mobile-satellite	Mobile-satellite service - mobile-satellite
Land mobile service - mobile-satellite	Fixed-satellite service - mobile-satellite	Mobile-satellite service - mobile-satellite
Land mobile service - mobile-satellite	Fixed-satellite service - mobile-satellite	Mobile-satellite service - mobile-satellite
Land mobile service - mobile-satellite	Fixed-satellite service - mobile-satellite	Mobile-satellite service - mobile-satellite

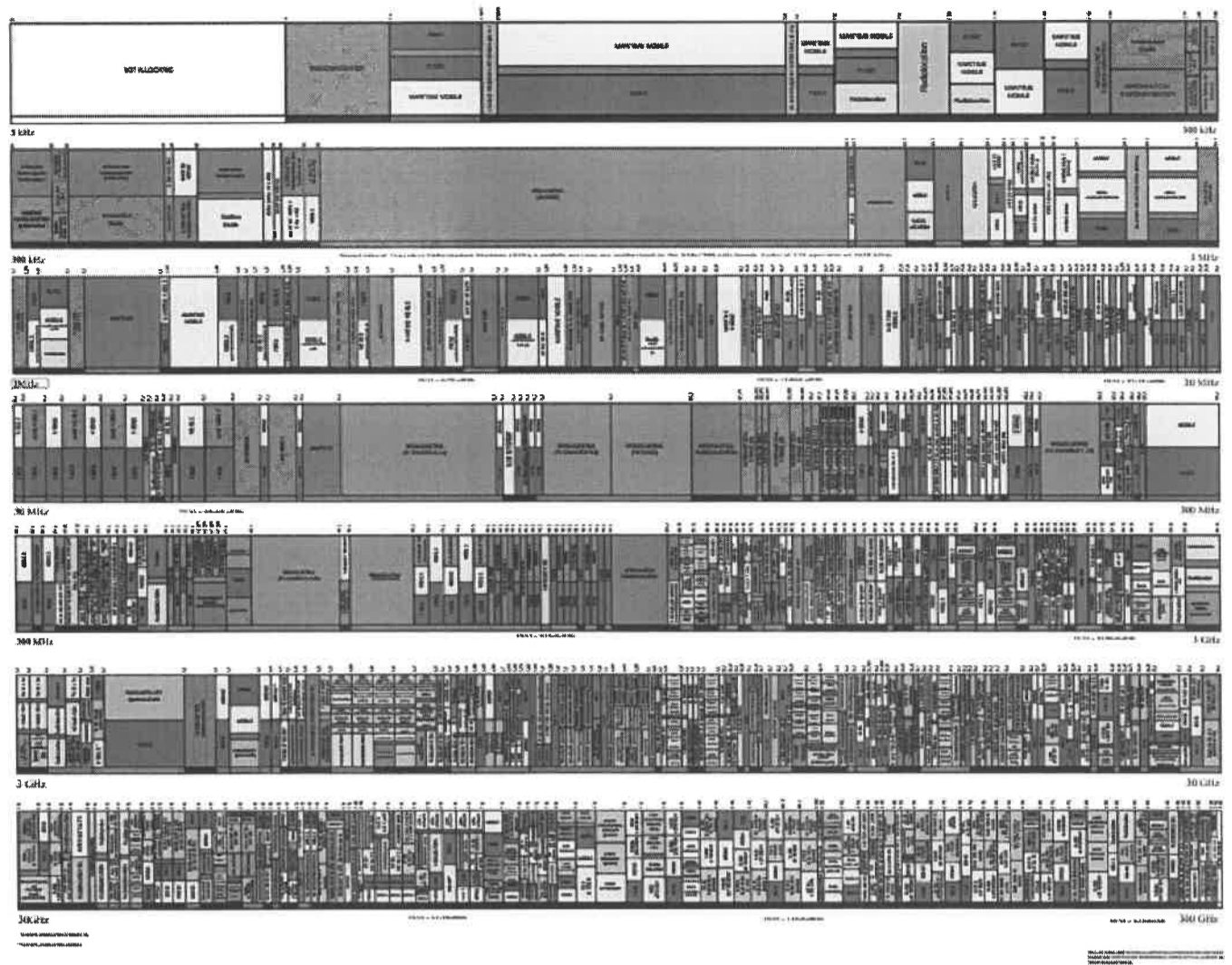
**ACTIVITY CODE**

Primary	Secondary	Earth station to space station
Primary	Secondary	Earth station to space station

**ALLOCATION USAGE DESIGNATION**

Code	Category	Allocation
1	Primary	Primary
2	Secondary	Secondary
3	Earth station to space station	Earth station to space station
4	Earth station to space station	Earth station to space station

**U.S. DEPARTMENT OF COMMERCE**  
National Telecommunications and Information Administration  
Office of Spectrum Management  
August 2012



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# UAS Spectrum: How Much

- A robust UAS industry will require significant quantities of spectrum to ensure safety and efficiency.
- 2009 studies estimate that, globally, UAS will require 34 MHz for terrestrial-based communications and 56 MHz for satellite-based systems.
  - Studies are based on certain technology and demand assumptions; the estimate for Beyond Visual Line-of-Sight satellite-based systems balloons to 169 MHz when using different assumptions
  - Studies predate the explosion of interest in commercial applications, especially sUAS
  - The studies only consider command and control links



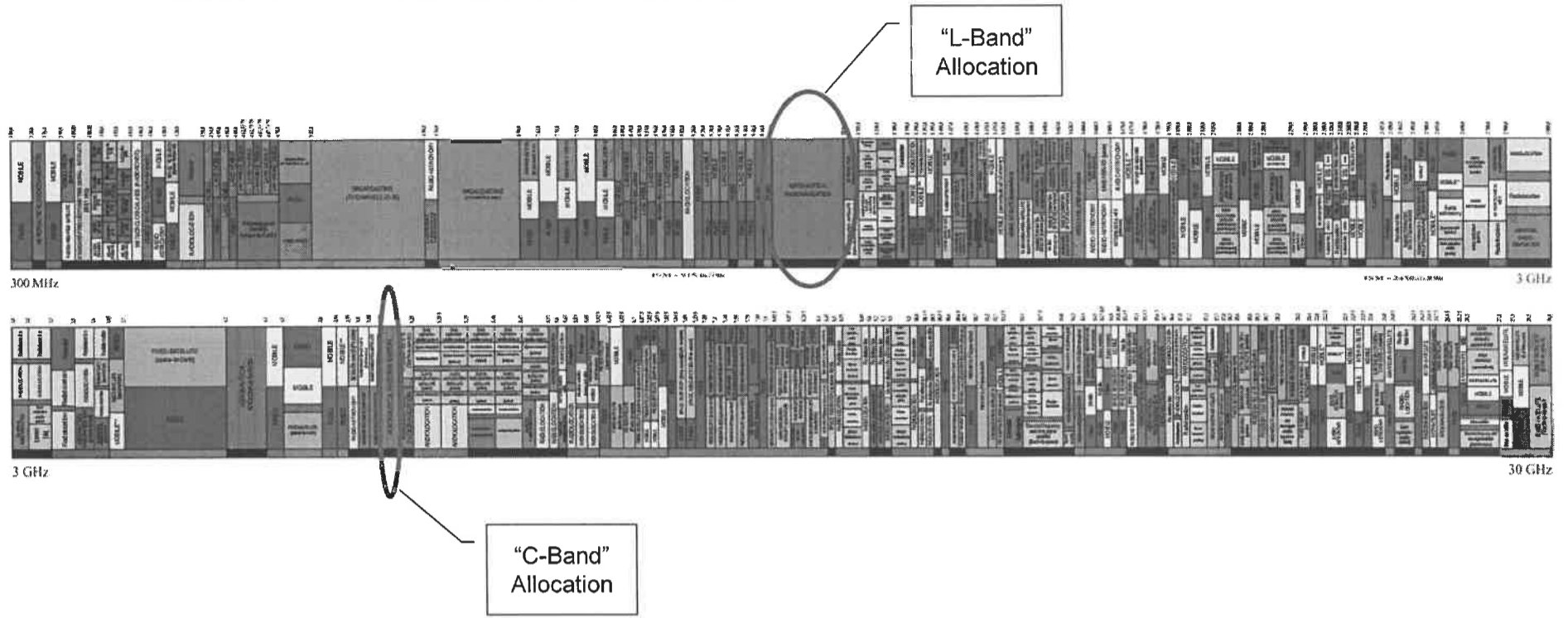


# UAS Spectrum: What We Have

- Spectrum has been allocated for commercial and civil UAS but is not yet available pending FCC rules and FAA adoption of UAS policies
  - L-Band: 960 -1164 MHz
    - Same spectrum is used for other aviation uses
  - C-Band: 5030-5091 MHz
    - Allocation supports both terrestrial and satellite-based services
  - There is no infrastructure to provide UAS control links



# Zooming in . . .



## UAS Spectrum: What We Have

- Other FCC-licensed bands could potentially support UAS command and control links:
  - Frequencies near 27 MHz and 72 MHz available for personal use under the FCC's Radio Control Radio Service
  - Frequencies near 915 MHz, 2450 MHz, and 5750 MHz that are available for unlicensed operations under the FCC's rules
  - Various frequency bands that are used for commercial wireless broadband services
- Some commercial spectrum allocations (e.g., 800 MHz cellular and various unlicensed bands) cannot be used to provide communications service to airborne receivers



# UAS Spectrum: What We Have

Unlicensed Spectrum Bands		
Spectrum Band	Aeronautical Mobile Permitted?	Comments
902-928 MHz	No	International Table specifically prohibits aeronautical mobile
2400-2483.5 MHz	Partial	In the U.S., 2400-2450 MHz is designated for amateur use. Mobile is permitted from 2450-2483.5 MHz. Must accept interference from ISM equipment (5.150)
5.15-5.25 GHz	No	International Table specifically prohibits aeronautical mobile
5.25-5.35 GHz	No	International Table specifically prohibits aeronautical mobile
5.35-5.47 GHz	No	International Table does not include a mobile allocation
5.47-5.725 GHz	No	International Table specifically prohibits aeronautical mobile
5.725-5.825 GHz	No	International Table does not include a mobile allocation
5.85-5.925 GHz	No	Mobile, non-Federal use is limited to Dedicated Short Range Communications operating in the Intelligent Transportation System radio service. (NG160)
Licensed Spectrum Bands		
Spectrum Band	Aeronautical Mobile Permitted?	Comments
614-698 MHz	No	Proposed commercial mobile allocation
698-806 MHz	Yes	763-775 MHz and 793-805 MHz are allocated for public safety use
824-849 MHz 869-894 MHz (Cellular)	No	FCC Rules prohibit use aboard aircraft.
1710-1755 MHz 2110-2155 MHz (AWS-1)		
1850-2000 MHz (PCS)	Yes	
2305-2320 MHz 2345-2360 MHz (WCS)	Partial	Aeronautical mobile is prohibited in the lower A Block (2305-2310 MHz). Certain aeronautical uses are permitted on a secondary basis in the 2310-2320 MHz and 2345-2360 MHz bands.
3.5-3.7 GHz	No	International Table prohibits aeronautical mobile



# UAS Spectrum: How to Get Access

- Command and control spectrum for UAS has been *allocated* but there is no established process for issuing *frequency assignments* to individual users
- The U.S. spectrum management structure complicates the licensing process:
  - FCC governs spectrum use rights for commercial and civil use
  - NTIA governs spectrum use rights for Federal uses



# UAS Spectrum: How to Get Access

- The FAA, FCC and NTIA have multiple options for distributing frequency assignments to support UAS activities:
  - Unlicensed/Dynamic Access
  - Command and Control frequency assignments
    - Band Manager
    - Frequency Coordinator
  - Commercial network model

# UAS Spectrum: How to Get More

- Getting international approval for more spectrum
  - WRC-2015
    - Proposal to use Fixed Satellite Spectrum in Ku (12/14 GHz) and Ka (17-20/27-30 GHz) for UAS
  - Aeronautical allocations are typically advanced and supported by ICAO
  - Any international actions require implementing U.S. regulations



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# UAS Spectrum: Things to Consider Doing

- Participate in the FAA Rulemaking
- Follow RTCA and ICAO activities
  - RTCA Special Committee 228
    - FAA asked RTCA to work with industry regarding development of UAS standards
    - Working to develop standards
  - ICAO
- Follow and support U.S. government preparations for WRC-2015 and beyond
- Participate in relevant FCC Rulemakings





## Global Forum 2015

Welcome to the keynote opening session, . . .

I am Anna Gomez, a partner at the law firm of Wiley Rein, where I advise clients regarding domestic and international telecommunications matters as well as on issues surrounding new and expanding uses of unmanned aircraft systems.

The digital transformation of global economies continues at breathtaking speed. Since we spoke last year, the digital economy – and regulatory policies -- have continued to grow and evolve. Big topics this year were big data, privacy and cybersecurity, unmanned aircraft, driverless cars, the Internet of Things, and disruptive sharing economy apps. Economic imperatives of cost reduction and globalization are driving business decisions, while regulators are focusing on setting and enforcing rules of the road that allow innovation to

flourish while protecting privacy and data, driving innovation and investment in their own economies, and freeing up spectrum for the many mobile uses in the digital economy.

Last year I gave you some quick forecasts of what's to come, I thought I would update them this year:

- An array of consumer robotics models is expected to become available during 2016.
- Enterprises will continue to integrate wearable technologies, such as smart glasses, semi-independent smart watches, and motion sensing devices.
- By 2020, there will be more than 3 billion global 4G LTE connections.
- While standards around 5G technology are still being developed, many companies are already conducting 5G

testbeds and trials. 5G service revenue is expected to exceed \$65 billion by 2025.

- We will continue to see global adoption of digital and mobile money services, which will accelerate financial inclusion and change economic practices of developing countries.
- The global market for consumer unmanned aircraft systems UAS will reach about \$2 Billion by 2022. That's a \$1B higher estimate than I told you about last year.
- More than 80% of households in developed countries have Internet access, compared to nearly 35% of households in developing countries. 57% of the world's population can't access the Internet, although the total number of connected individuals rose from 2.9 billion in 2014 to 3.2 billion this year.
- About 80 "things" are newly connected to the Internet each second, and that figure is expected to grow.

- The value of the global digital content market will reach \$154 billion annually by 2019, with the biggest driver of market revenue from mobile and online games.
- The global Internet of Things market will grow from about \$2 trillion to \$7.1 trillion by 2020.
  - But today about 90 % of all IoT devices are being installed in the world's developed regions
  - By 2020 we'll have up to 26 billion individual devices worldwide
- By 2018, 62 percent of new cars sold worldwide will have embedded Internet connectivity.
- By 2020, 4 of five smartphone connections worldwide will come from the developing world.

With so much connectivity also comes challenges.

- How do we ensure universal broadband connectivity?

- How can policymakers set the tone to allow innovators to enter the market and introduce disruptive innovations?
- How do we allocate spectrum to meet consumers' – and innovators -- thirst for bandwidth?
- How can policymakers create an environment conducive to the take-up of services that address users' concerns about privacy and security?

We have a very distinguished set of speakers for our session today, who will provide us some interesting perspectives on these and other issues in their respective areas of the world.

Since we want to make sure we have sufficient time for dialogue, I do not plan to review each of our speakers' many accomplishments. So please refer to their bios, which were provided in your packets.

We are very fortunate that our opening speaker today is Mikko Kosonen, who is the President of the Finnish Innovation Fund Sitra. We are so pleased to learn about innovation and sustainability in Finland.

[ speaks]

Thank you very much, and we are grateful that you will be able to join our dialogue this session.

Our next speaker is Chancellor Anja Wyden Guelpa, who is the Chancellor for the State of Geneva, Switzerland.

[speaks]

Our next speaker is Jorgen Abild Andersen, who is Chairman of the OECD's Committee on Digital Economy Policy

[Jorgen speaks]

Our next speaker is Adriane LaPointe, who is Senior Policy Advisor at the U.S. Department of State's Office of Communications and Information Policy

[ speaks]

Our next Speaker is Audrey Scozzaro Ferrazzini, who is Senior Manager, Government Affairs Europe, with Qualcomm

[speaks]

Our next speaker is Luis Romero, who is the Director General from the European Telecommunications Standards Institute.

[Speaks]

And our final speaker today is Yoshio Tanaka, who has so many titles and positions that I will sum it by calling him Professor from the National Institute of Advanced Industry Science and Technology in Japan.

[speaks]

**Qs:**

- 1. Everyone: What are the prerequisites to achieving a well-rounded ICT ecosystem and to make the digitization work for inclusive and balanced economic development?**
- 2. Mikko Kosonen: what are the new sustainable growth opportunities of Finland enabled by digitalization,**



**3. Mikko Kosonen: How to make digitalization happen in Finland? What can others learn from your experience.**

**4. Adriane: Two years the U.S. helped create the Alliance for Affordable Internet, which is a coalition that draws on expertise from governments, the private sector, and civil society to assist policymakers in expanding internet access at low prices. Can you give us an update of this alliance and how it relates to the connected globe [check the name] initiative that Secretary Kerry just announced yesterday?**

**5. Europe's right to be forgotten decision has raised many eyebrows in the U.S., particularly about the extraterritorial reach of the decision as well as the concern that the right to be forgotten will lead to less accurate search results, thereby lessening the trust consumers have in the internet. How do you see the right to be forgotten evolving, and should we be concerned that it will erode consumer's trust?**

**6. Luis Romero: How does ETSI envision the evolution from "ICT sector" to "digitization of the economy and society" and the role of standards therein?**

**7. Luis Romero: The Internet of Things and Smart Cities raise wonderful opportunities, but also challenges. With everything being connected, how**

does ETSI address the multiplication of (industry) players involved in standardization in that context?

8. Luis Romero: Since ETSI cooperates with organizations throughout the world, what can you tell us about any lessons learned from the implementation of digitization strategies?

9. Luis Romero: Does the citizenship of standards matter in the global economy?

10. In the shift from an industrial to a digital economy, many countries are targeting the Internet of Things as a means to deliver faster growth.

11. What are the drivers behind the creation and growth of sustainability for digitization and entrepreneurial ecosystems?

12. Audrey: How is digitization going to further transform our governments? A recent visible change is a trend towards open, digital, innovative, and collaborative government. I know that Geneva has had much experience in this area. [Would Yoshio be appropriate for follow-up?

13. Jorgen: The Digital Economy is rapidly developing these years. Which area of digitization - if you should mention only one - is in particular a prominent contributor to a flourishing Digital Economy?? (My answer would point at the huge potential of Big Data and Data Driven Innovation -

an OECD report on this is due to be published beginning of October).

14. Jorgen: I think we all appreciate that the Digital Economy has a huge potential to foster innovation, growth, jobs and social prosperity. Are there no threats?? What - in your mind - are the 2-3 most prominent potential "blocking stones" for a flourishing Digital Economy? (My answer will mention i.a. lack of appropriate skills and legitimate concerns regarding potential privacy infringements which are not addressed appropriately.)

15. Jorgen: potential in terms of jobs and growth in big data and how setting public data free to use without charge can create jobs. you stated in an interview earlier this year that "new applications and services being developed in 'big data' can be used to help in connection with societal challenges." Can you give us some examples of what you meant by that?

16. Jorgen: the internet would never have developed to the state it is today had it been regulated by traditional telecom regulation. I therefore think that there are great advantages in continuing with a multistakeholder driven governance model. It is, however, important to understand that the Internet has grown far beyond the boundaries of the US and that stakeholders outside the US should have a larger say to maintain the legitimacy of the current MSH model.

17. Jorgen: Open govt data is a philosophy - and increasingly a set of policies - that promotes transparency, accountability and value creation by making govt data available to all. By making their datasets available, public institutions become more transparent and accountable to citizens. By encouraging the use, reuse, and free distribution of datasets, govts promote business creation and innovative, citizen-centric services.

18. Anja: development of an open internet accelerates economic growth and social development. This success is due to the openness of the Internet ecosystem which includes all stakeholders.

19. Anja: At last year's global forum you told us about the government testing its online voting technology system, which has successfully enabled people to vote online rather than through a ballot box or via postal voting. Can you give us an update on that initiative?

20. Question: How can policymakers make access to the Internet more affordable? Are taxes an issue? Would local hosting of content help lower costs? What about roaming charges?

21. 5G will be an important platform for supporting digitization of our economic and societal activities, giving the opportunity to reinvent telecom industrial landscape. Over the last 18 months 5G has greatly accelerated, with standards, and tests

being developed, and with international efforts to allocate spectrum for 5G. Are we doing enough to prepare for 5G?

22. What are the main priorities in terms of standardization for 5G and what work is being done in this area?

23. How can a user-centric vision to 5G be ensured based fully around the needs of customers and operators?

24. What work is being done in developing and standardizing a blueprint for 5G deployment?

25. Policymakers around the world face many challenges in this connected age of responding to disruptive innovators in today's digital economy. Do disruptive innovators present a dilemma or an opportunity, and how do you each see your organizations responding to them?

26. How can policymakers appropriately balance allowing innovation to flourish while protecting consumers and ensuring appropriate infrastructure deployment?

27. ICANN and its stakeholders are discussing the proposed undertaking the internationalization of the Internet. Numerous issues are being addressed as we proceed, one of those being accountability. ICANN and its stakeholders have

recognized, however, that it is important to ensure inclusion in the discussion of those parts of the world that have not been active in ICANN. How is that progressing and what can be done to further address the concerns of those who have not traditionally been part of the ICANN process?

28. As we are looking at transparency, accountability, governance structures for all stakeholders in ensuring connected age, where does one look at accountability and transparency of respective parties? Where are the checks and balances that allow for continued innovation but ensure responsibilities lie where they need to lie? Even with the cloud and the internet of things – at which point is it the responsibility of the producer of the “thing” (such as a smart refrigerator) -- as opposed to the user -- to secure the information?

29. Unmanned aircraft systems are growing in popularity not just among hobbyists, but also for commercial and public safety uses. Amazon would like to use them to deliver packages, the motion picture industry and news organizations for filming, Facebook to provide internet access in unserved regions, even farmers are interested in them for monitoring their crops. From the public safety perspective, UAS have been used to film post-disasters in order to provide a quicker, more targeted response. What are the opportunities for unmanned aircraft and what stands in the way of more widespread deployment?

**30. Today's connected users are made up primarily of users who are familiar with not having a connected age. With that come issues of trust, but also an awareness that security needs to be a concern (even if we don't know exactly how to ensure it). How do we secure the environment for a generation of users that don't know anything but a connected age?**



November 16, 2015  
Washington, DC

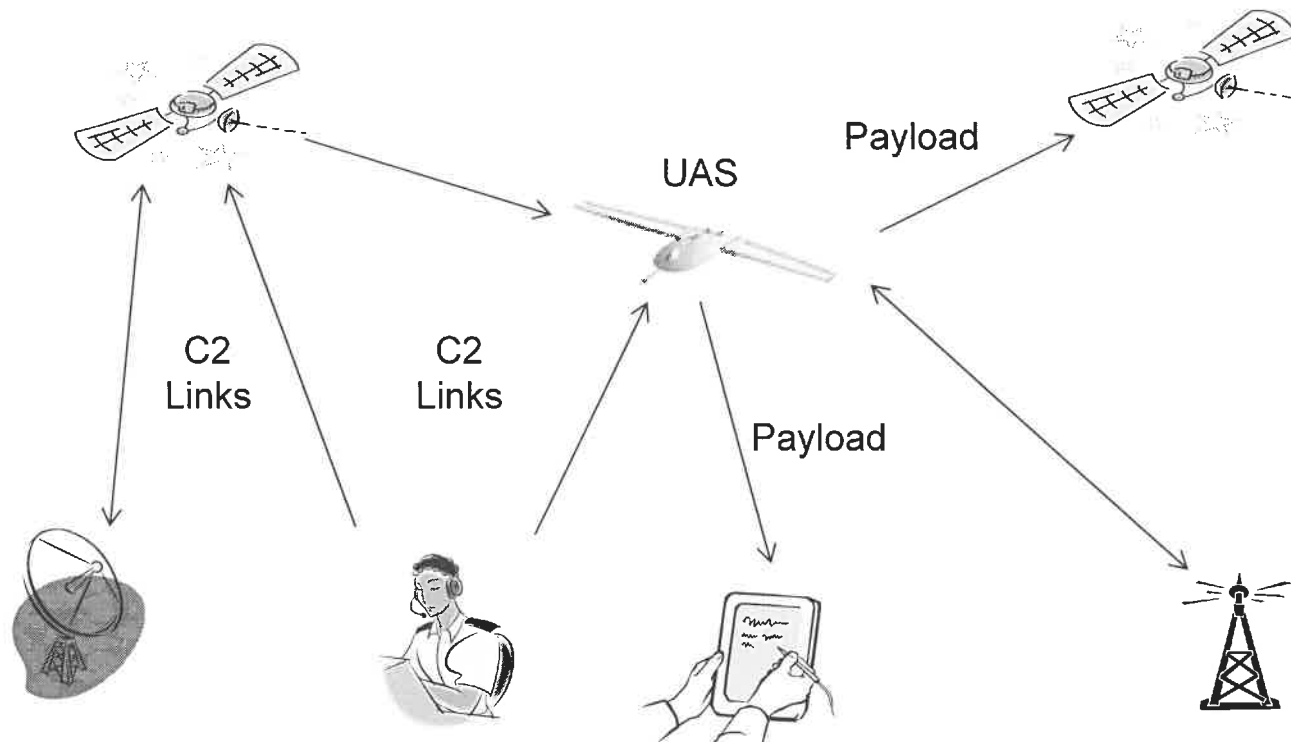
# UAS Spectrum

**Presented by**  
Anna M. Gomez



# Background: Spectrum and UAS

- Spectrum is necessary to enable safe flights for a wide variety of applications and uses



# Spectrum for VLOS

- Small UAS currently operate VLOS flights utilizing the 900 MHz, 2.4 GHz, and 5 GHz Bands on an unlicensed basis
- Unlicensed spectrum is not optimal for BVLOS
  - Limited range (less than a mile)
  - Line of Sight
  - Not Protected
  - Congested because supports diverse technologies

# Spectrum for BVLOS

- Two bands have been allocated for commercial and civil UAS:
  - L-Band: 960 -1164 MHz
    - Same spectrum is used for other aviation uses
  - C-Band: 5030-5091 MHz
    - Allocation supports both terrestrial and satellite-based services

# Spectrum for BVLOS

- While the L- and C-Band spectrum has been allocated, there is no established process for issuing frequency assignments to individual users
  - Requires FCC licensing and service rules
- Requires changes to NTIA “Redbook”

# Alternative Spectrum Options

- Other alternatives include
  - Existing commercial networks' spectrum
    - Suitable for below 500 feet
    - R&D Needed to Prove Feasibility and Reliability
    - Licensed and managed, though not in the aeronautical spectrum
  - Potential for using satellite allocations
    - World Radio Conference proposals to use Fixed Satellite Spectrum in Ku (12/14 GHz) and Ka (17-20/27-30 GHz) bands for UAS

# Infrastructure

- Who will build and operate the infrastructure for UAS communications needs?
- Key considerations will include:
  - Budget and timeframe
  - Promotion of efficient use of spectrum
  - How to accommodate off-network operators
  - Degree of federal oversight
  - Enforcement of noncompliant spectrum uses

# Questions?

## Stay Current:

### UAS ALERTS

Get updates with substantive analysis or summaries of major UAS developments.

To subscribe to these alerts, follow <http://www.wileyrein.com/?NLS=1> and select the link "Subscribe to Newsletters/Industry Updates."

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**Anna Gomez**

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# The FirstNet Opportunity

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February 2016

Presented by  
Anna M. Gomez



# Overview

- FirstNet Background
- FirstNet Request for Proposals
- Timeline
- State Opt-Out Process
- Questions

# Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act)



- Spectrum – Reallocates D block for Public Safety Broadband Network
- Funding – \$7B allotted with \$6.5B available for network build-out
- Governance – Creates FirstNet as an independent authority within the National Telecommunications and Information Administration (NTIA)

# Spectrum Act – FirstNet Role & Duties

- Duties: Take all actions necessary to ensure the building, deployment, and operation of the nationwide public safety broadband network (NPSBN)
  - Ensure nationwide standards
  - Protect against cyberattack
  - Promote competition in the equipment market
  - Promote integration of PSAPs
  - Rural coverage requirements including partnerships with existing commercial mobile providers
  - Hardened at physical, user-access and cybersecurity layers
  - Provide local control to public-safety users

# Spectrum Act – Nationwide Public Safety Broadband Network

- Single network architecture based on commercial standards
  - Core network
  - Radio access network (RAN)
- Public Safety Grade
  - Ubiquity
  - Hardened
  - Capacity
- Leveraging existing infrastructure
  - Commercial wireless and private networks
  - Federal, State, tribal, or local infrastructure

# Spectrum Act – Nationwide Public Safety Broadband Network

- FirstNet must:
  - Not compete directly via retail offerings to consumers
  - Be self-funded via fees
    - Minimum annual payment levels:
      - \$80 million for years 1 – 5
      - \$130 million for years 6 – 10
      - \$205 million for years 11 – 15
      - \$305 million for years 16 – 21
      - \$430 million for years 22 - 25
  - Reinvest all excess revenues in the NPSBN
  - Consult with states, territories, and tribes
    - States can decide to deploy their own (RAN) (aka “opt out”)

# FirstNet Players

- NTIA
- Public Safety Advisory Committee
- Governors
- State Points of Contact
- Federal Communications Commission (FCC)
- NPSBN Partners

# FirstNet Request for Proposals

- Released January 13, 2016, proposals due April 29, 2016
  - Nationwide, comprehensive network/service solutions
  - Objectives based vs. requirements based
- Pricing methodology: \$6.5B + fixed payment in exchange for use of the Band 14 excess network capacity
- Performance period: 25-year award
- State coverage objectives
  - Substantial rural coverage
  - Phased deployment
- Minimum technical requirements
- Milestone delivery schedule
  - Consistent with 3GPP release schedule

# FirstNet's Financial Sustainability Model

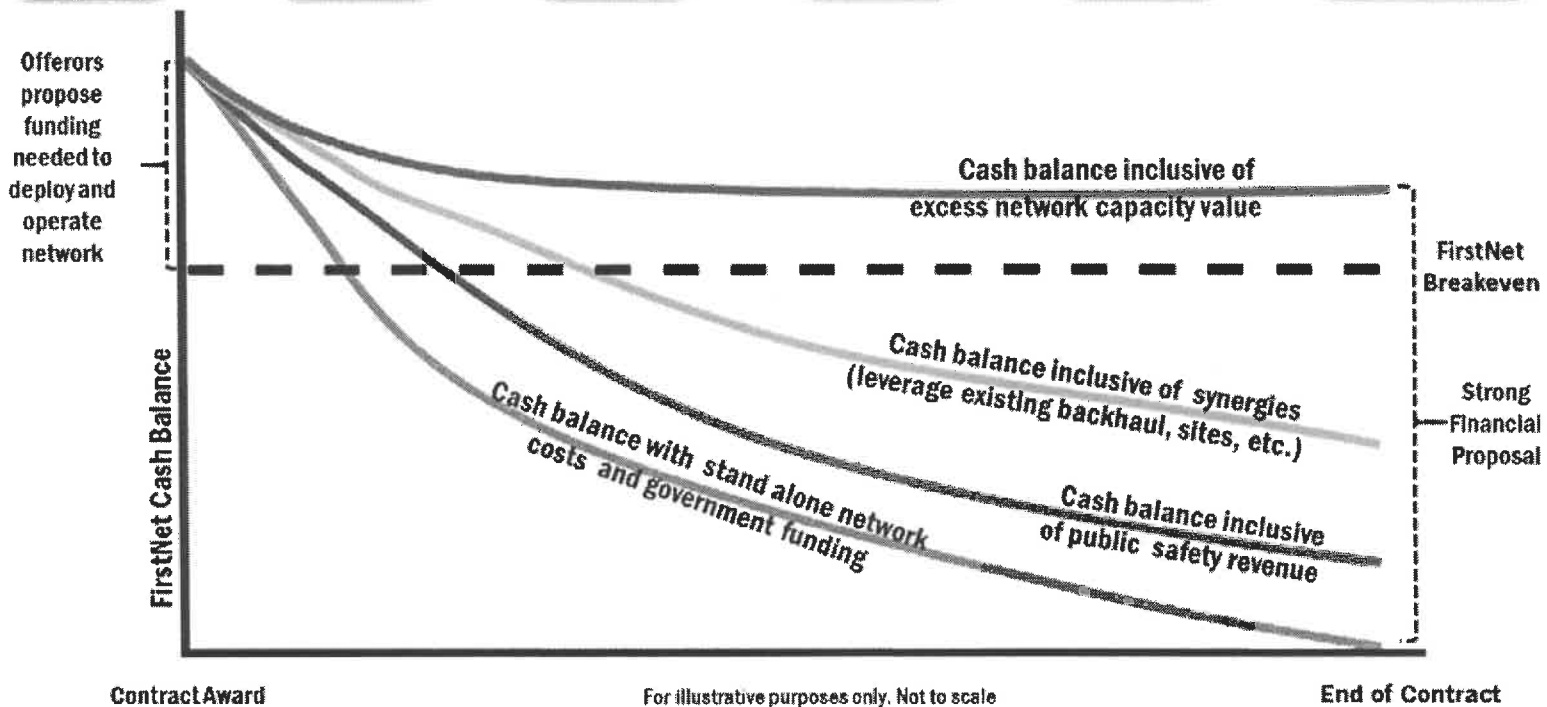
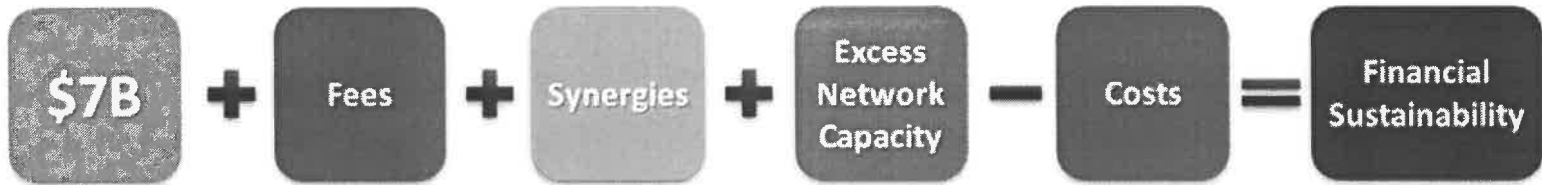


Figure 2 The FirstNet Opportunity



# Statement of Objectives

## Section C: Statement of Objectives (cont.)



**Building, Deployment, Operation & Maintenance of the NPSBN**



**Financial Sustainability**



**First Responder User Adoption**



**Device Ecosystem**



**Applications Ecosystem**



**Accelerated Speed to Market**



**User Service Availability**



**Service Capacity**



**Cybersecurity**



**Priority Services**



**Integration Of State-Deployed RANs**



**Integration of Existing Commercial/ Federal/ State/Tribal/Local Infrastructure To Support NPSBN Services**



**Life-Cycle Innovation**



**Program and Business Management**



**Customer Care and Marketing**



**Facilitation of FirstNet's Compliance with the Act & Other Laws**

# RFP Evaluation Process: Phase I

- Capability Statements (due March 17, 2016)
  - Best qualified will be invited to submit proposal
  - Will provide feedback on strengths/weaknesses, whether viable competitor
  - Criteria:
    - Public Safety use and adoption
    - Nationwide coverage/capacity
    - Rural partnerships
    - Ability to monetize the excess network capacity
    - Financial standing

# RFP Evaluation Process: Phases II - IV

- Phase II: Solicitation Conformance
- Phase III: Pass/Fail
  - Criteria:
    - Minimum Payment Thresholds (for each state/territory)
    - Rural Partnerships (for at least 15% of total nationwide rural coverage)
- Phase IV: Detailed Evaluation
  - May hold oral/technical presentations

# RFP Evaluation Factors

- Basis for Award

- FirstNet will award to the Offeror that provides the overall best value to the Government, when all evaluation factors are considered

- Evaluation Factors

- Business Management
- Coverage and Capacity
- Products and Architecture
- Past Performance
- Offeror's Value Proposition Assessment
  - Ability to meet all objectives in exchange for revenues from public safety users and non-public safety users, the \$6.5 Billion

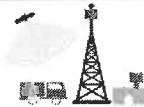
# RFP Evaluation Factors

## Section M: Evaluation Factors for Award (cont.)



### Business Management Factor

- Leadership and Program Management
- Public Safety Customer Acquisition
- Customer Care and Lifecycle Sustainment
- Financial Standing
- Delivery Mechanism for State Plans



### Coverage & Capacity Factor

- Band 14 & Non-Band 14\* Coverage and Capacity
- Radio Access Networks
- IOC/FDC Milestones for Coverage and Capacity
- Ability to demonstrate rural partnerships



### Value Proposition Assessment

- Meets FirstNet's \$6.5B
- Demonstrated synergies & added value
- Unbalanced/unreasonable value determination



### Past Performance Factor:

- Successful project completion history (e.g., similar scope, within schedule, within budget, quality deliverables)
- Quality of cooperation and responsiveness
- Performance measure implementation and improvement



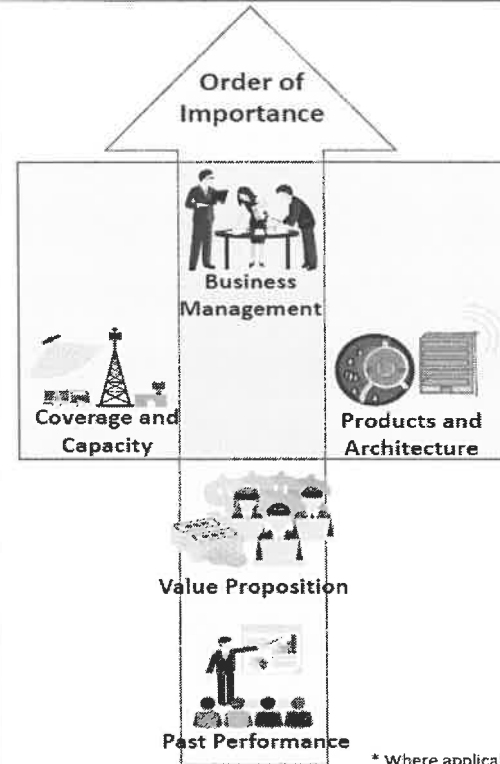
### Products & Architecture Factor

- Service (public safety features)
- Applications
- Device Ecosystem
- Architecture and Infrastructure
- Operations
- Security
- Test Strategy



### Risk

- Proposal Risk
- Performance Risk



# RFP Timeline

- February 12, 2016: Questions to clarify the RFP
- March 10, 2016: FirstNet's pre-proposal conference
- March 17, 2016: Capability statements
- April 29, 2016: RFP responses
- ~ November 1, 2016: Estimated award date
- ~ May 1, 2017: States and territories deployment plans
- ~ July 2017: State opt-in decisions begin
- ~ November 1, 2017: First coverage milestone for Band 14 network
- ~ November 2021: 100% coverage

# RFP Deployment Schedule

- Five-year deployment schedule
  - MVNO operation within six months from award
  - Initial operational and final operational capabilities
- Band 14 rural and non-rural coverage milestones:
  - 20% within first year
  - 60% within two years
  - 80% within three years
  - 95% within four years
  - 100% within five years

# State Opt-Out Process

- Upon completion of the RFP process, FirstNet will notify the Governor of each State (or his/her designee)
- No later than 90 days after, each Governor must choose whether to opt out
- If the State opts-out, the Governor must notify FirstNet, NTIA, and the FCC. The State must:
  - In 180 days, develop and complete RFPs for the construction, maintenance, and operations of State radio access network
  - Submit an alternate plan to the FCC that demonstrates:
    - That the State will be in compliance with minimum technical interoperability requirements
    - Interoperability with the nationwide public safety broadband network



## State Opt-Out Process (cont'd)

- If the FCC approves the plan:
  - The State may apply to NTIA for a grant to construct the State RAN
  - The State shall apply to NTIA to lease spectrum capacity from FirstNet
  - The State must pay any user fees associated with State use of elements of the PSBN
- To obtain a grant and lease, the State must demonstrate:
  - Technical capability to operate, and the funding to support, the State portion of the RAN;
  - Ability to maintain ongoing interoperability with the nationwide PSBN;
  - Ability to complete the project within comparable timelines specific to the State;
  - Cost-effectiveness of the State plan; and
  - Comparable security, coverage, and quality of service to that of the nationwide PSBN
- If the FCC disapproves the plan, FirstNet will proceed with its original plan as proposed

**Questions?**

## Contact Information

- Anna M. Gomez  
202.719.7265  
[agomez@wileyrein.com](mailto:agomez@wileyrein.com)

# INCE'S NETWORK INFRASTRUCTURE FORUM

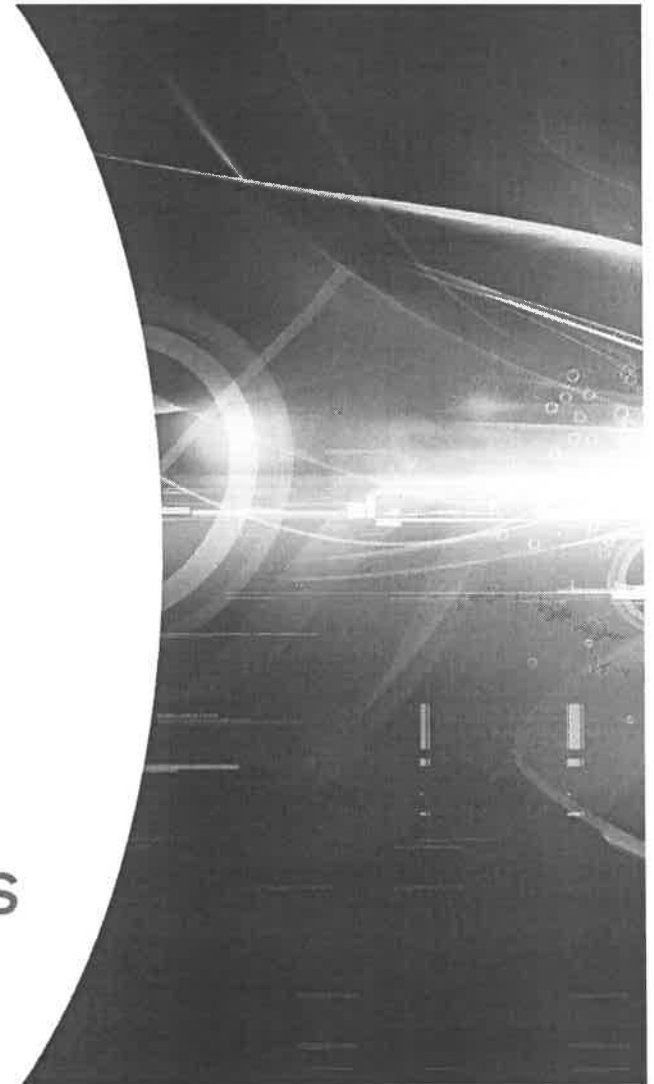
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Conference: March 22-23, 2016

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## Connecting the Wired and Wireless



# WELCOME!

## Session Title

**Taking Advantage of the Opportunities Offered by FirstNet**

## Presenters:

- **Anna M. Gomez**, Partner, Wiley Rein LLP
- **Chris Krafft**, Vice President Public Safety, Telecommunications Business, Black & Veatch Corporation
- **David Oberholzer**, Wireless Business Development, Fujitsu Network Communications, Inc.
- **Kyle Quillen**, Founder and CTO, Agile Networks
- **Chris York**, Director of Channel Sales & Marketing, Dragonwave, Inc.

# Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act)



- Spectrum
- Funding
- Governance

# Spectrum Act – FirstNet Role & Duties

- Duties: Take all actions necessary to ensure the building, deployment, and operation of the nationwide public safety broadband network (NPSBN)
  - Ensure nationwide standards
  - Protect against cyberattack
  - Promote competition in the equipment market
  - Promote integration of PSAPs
  - Rural coverage requirements including partnerships with existing commercial mobile providers
  - Hardened at physical, user-access and cybersecurity layers
  - Provide local control to public-safety users

# Spectrum Act – Nationwide Public Safety Broadband Network

- Single network architecture based on commercial standards
  - Core network
  - Radio access network (RAN)
- Public Safety Grade
  - Ubiquity
  - Hardened
  - Capacity
- Leveraging existing infrastructure
  - Commercial wireless and private networks
  - Federal, State, tribal, or local infrastructure



# Spectrum Act – Nationwide Public Safety Broadband Network

- FirstNet must:
  - Not compete directly via retail offerings to consumers
  - Be self-funded via fees
  - Reinvest all excess revenues in the NPSBN
  - Consult with states, territories, and tribes
    - States can decide to deploy their own RAN (aka “opt out”)

# FirstNet Request for Proposals

- Released January 13, 2016, proposals due May 13, 2016
  - Nationwide, comprehensive network/service solutions
  - Objectives based vs. requirements based
- Pricing methodology: \$6.5B + fees + fixed payment for Band 14 excess capacity
- 25-year award term
- Single nationwide award estimated November 2016
- Rural partnerships important

## RFP Timeline

- March 31, 2016: Capability statements
- May 13, 2016: RFP responses
- ~ November 1, 2016: Estimated award date
- ~ May 1, 2017: States and territories deployment plans
- ~ July 2017: State opt-in decisions begin
- ~ November 1, 2017: First coverage milestone for Band 14 network
- ~ November 2021: 100% coverage

## RFP Deployment Schedule

- Five-year deployment schedule
  - MVNO operation within six months from award
  - Initial operational and final operational capabilities
- Band 14 rural and non-rural coverage milestones:
  - 20% within first year
  - 60% within two years
  - 80% within three years
  - 95% within four years
  - 100% within five years

## Contact Information

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agomez@wileyrein.com  
Wiley Rein, LLP



# The Internet of Things: Regulatory and Policy Issues

Anna M. Gomez  
Wiley Rein LLP

## Governance

- Government can support – or hinder – IoT Deployment
- Two roles: user and regulator
- Many players: FCC, DOC, DOT, DHS, FTC, FDA, states and localities, and international

## Privacy & Security

- How to safeguard personal data
- How to ensure devices, networks, and applications are secure
- Regulatory actions: multistakeholder processes, rulemakings, and enforcement
  - FTC, NTIA, NIST, NHTSA, DHS, state, local, etc.



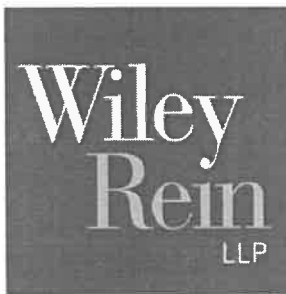
## Spectrum

- IoT devices need spectrum and bandwidth
- Spectrum in pipeline:
  - 3.5 GHz
  - Spectrum Frontiers (Millimeter Wave)
  - 600 MHz/Incentive Auctions,
  - AWS-3
  - 5.9 GHz
  - UAS spectrum (L- and C-Bands; FSS)



## Questions?

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# Public Unmanned Aircraft Systems

June 2016

**Anna M. Gomez**

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*These slides are accompanied by an oral presentation and are not to be relied upon for legal advice.*

## Overview

- Types of UAS operators
- Public Authorizations
- Part 107 Rule
- Section 333 Exemption
- Remote Pilot Certificate with Small UAS Rating
- Small UAS Registration Required
- Law Enforcement Guidance

## Three Types of Operations

- **Recreational or Hobbyist Operators**
  - Flying for enjoyment and not for work, business purposes, or for compensation for hire
- **Public Operators**
  - Government entities or organizations
- **Civil or Commercial Operators**
  - Flying for work, business purposes, or for compensation for hire

## Recreational or Hobbyist Operators

- Don't need FAA approval as long as comply with certain limits
  - Below 55 lbs
  - Below 400'
  - Safe distance from populated areas/other aircraft
  - Community based safety and programming
  - May not fly within 5 miles of an airport without prior notice to air traffic control
- Must register the aircraft
- B4UFLY App

## Public Operations

- Federal or state government or subdivision
  - Permitted to hire civil operators to perform a governmental function
- May not be used for commercial purposes
- Options to obtain authority to fly:
  - Part 107 rule
  - Public Certificate of Waiver or Authorization (COA)

## Civil or Commercial Operators

- Three ways to get authority to fly
  - Part 107 (“small UAS”) rule
  - Section 333 Exemption
  - Airworthiness certificate for the aircraft



## Public Certificate of Waiver or Authorization (COA)

- Allows operator to use defined block of airspace, with special provisions unique to proposed operation
- Agency self-certifies aircraft and crew
- On-line application
- Processing time approximately 60 days
- Renewal up to two years

## Public COA (cont'd)

- Must first file a Public Declaration from city, county, or state attorney's office certifying:
  - Proposed operator is part of a governmental entity
  - UAS is a public aircraft (government owned or leased for minimum of 90 days)
  - UAS will be used for a governmental function
  - UAS will not be used for commercial purposes

## Public Safety COAs

- **Training COA**
  - Training and evaluation at specific training site clear of housing areas, roads, persons, watercraft
- **Jurisdictional COA**
  - Issued when the organization has shown proficiency in flying
  - Permits public safety to operate a particular aircraft, for a particular purpose, in a particular area
  - Allows operator to use a defined block of airspace
  - Usually issued for a specific period, up to two years

## Emergency COA

- One-time COA for time-sensitive emergency missions and must fly outside of existing COA boundaries, e.g.,
  - Nighttime
  - Flights in more restricted areas
  - Operate outside of COA location
- Must have active COA
- Operate outside of COA location
- 24/7 hotline answers calls and issues COAS to operate immediately in specific locations

## Part 107 “small UAS” Rule

- FAA announced June 21, 2016, effective late August
- Public operators may voluntarily elect to operate under Part 107 as a civil rather than public aircraft
  - Instead of obtaining public agency COA
  - BUT, same must comply with Part 107 requirements, unless obtain waiver(s)

## Part 107 “small UAS” Rule

- Summary:
  - 55 lbs or less
  - Max 400’ altitude
  - Max speed 87 knots/100 mph
  - Daytime only, allows civil twilight with appropriate lighting
  - VLOS only
  - Operations over nonparticipating people not permitted

## Part 107 “small UAS” Rule

- Summary (cont’d):
  - Pilot must have FAA-issued Remote Pilot Airman Certification with small UAS rating
  - If accident loss higher than \$500, must report within 10 days
  - NOTAMs not required
  - If airport is in Class G, no requirement for notice, even to air traffic control
    - FAA developing procedures for operations in other classes of airspace

## Part 107 Waivers

- FAA will issue waivers for some rules, e.g.,
  - Prohibition of flights over people
  - Prohibition on nighttime operations
  - Minimum flight-visibility and cloud-clearance
  - Maximum altitude limitations
  - Requirement to yield right of way
- FAA expects process to be streamlined



## Part 107: Operations in Certain Airspace

- Operations in Class G airspace do not require approval
- Methods for seeking approval to operate in Class B, C, D, and E airspace:
  - Approval from relevant ATC facility
  - Waiver
- COAs no longer required
- Request authorization in writing (online portal being developed), not via radio to ATC
- FAA working on guidance

## Remote Pilot Certificate with Small UAS Rating

- Under Part 107, must have a “remote pilot certificate with small UAS rating,” which requires:
  - Operator must be at least 16 years old
  - English proficiency
  - Pass TSA background check
  - Pass a written aeronautical knowledge exam at an FAA-approved testing center
  - Pass a recurrent aeronautical knowledge test every 24 months
  - No aeronautical experience or flight proficiency required
  - No airman medical certificate

## Remote Pilot Certificate with Small UAS Rating (cont'd)

- Applicants with a Part 61 pilot certificate only have to take online training
- Once complete knowledge test, complete FAA Airman Certificate and/or Rating Application (IACRA) to receive the remote pilot certificate
  - FAA will issue a temporary airman certificate online and mail a permanent certificate within 120 days
- Tests and courses will be available in late August
  - Course materials available today at [www.faasafety.gov](http://www.faasafety.gov)

## Section 333 Exemption

- Over 5,300 exemptions granted
- Blanket COA for 333 exemption flights under 400'
- FAA will evaluate pending 333 exemption requests per three tiers:
  - Proposed operations fall under new Part 107
  - Proposed operations can be covered by waivers
  - Proposed operations not waivable

## Registration

- Required by FAA as of December 21, 2015
- Anyone who owns a small UAS over .55 lbs (250 g) and less than 55 lbs (25 kg) must register
- Applies to public UAS
- Failure to register could result in up to \$27,500 in civil penalties and up to \$250,000 in criminal fines and/or imprisonment for up to three years



# FAA Law Enforcement Guidance

[www.faa.gov/uas/resources/law\\_enforcement](http://www.faa.gov/uas/resources/law_enforcement)

# Questions?

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SILICON FLATRONS QUESTIONS  
October 2015

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When I read the materials to prepare for our session, it made me think of how the FCC General Counsel provides advice to the Commission. The GC's advice is couched in terms of "what is the litigation risk of this decision." Litigation risk is a risk-based assessment — what is the likelihood this item will be appealed, and what is the likelihood of success if it is appealed. The Commissioners make the determination of what level of risk they are willing to take in enacting a particular policy. This contrasts with my experience in the Executive Branch, where the lawyers "clear" on all items and make determinations of whether a decision is or is not legal. I believe the former method allows the Commission to be more innovative and nimble than the Executive Branch.

What can go wrong? What are the consequences? How likely is it?

1. The FCC's General Counsel generally couches its advice in terms of the litigation risk of a decision. The Commissioners make the determination of what level of risk they are willing to take in enacting a particular policy. This contrasts with my experience in the Executive Branch, where the lawyers "clear" on all items and make determinations of whether a decision is or is not legal. I believe the former method allows the Commission to be more innovative and nimble than the Executive Branch.
  - a. What are your thoughts on this comparison?
  - b. Would quantitative risk assessments encourage innovative policymaking?
2. Do quantitative risk assessments make regulators' decisions more or less fact-based? Would this also be true for business judgments?
3. How, practically, would the decision making work at the FCC?
  - a. Would the staff present a matrix to the Commissioners, and then the Commissioners would choose among a menu of options?
  - b. Should the Bureau release a public notice containing its risk-based analysis for public comment prior to reaching a final decision?
  - c. What would you say are the most important elements of a risk-based analysis?
  - d. What are other agencies' practices in this area?
4. One case in point in which the FCC could have conducted a risk-based assessment is the upcoming incentive auction. The upcoming incentive auction poses a number of risks for broadcasters. Broadcasters must determine if they want to participate in the auction and, if they do not, will likely be facing a mandatory relocation of their physical broadcasting channel. Has the FCC adequately considered the risks to broadcasters in making its repacking decisions affecting broadcasters post-auction?



5. Shawn: You have significant experience developing standards to increase reliability and safety for wireless technologies. How would your experiences over the years inform a regulatory agency's actions to ensure increased reliability and safety for wireless technologies?
6. Gary: How have other regulators used these techniques?
7. Decision-makers tend to like yes/no answers. Doesn't this make their job harder? How would decision makers use the assessments?
8. Change causes discomfort for decision-makers. What difficulties do you foresee the FCC would face in that transition?
9. Any thoughts on how the decisions at the FCC would have come out differently had they employed this risk assessment analysis?
  - a. Gary: Who have been the winners and losers when utilizing this assessment?
  - b. Is there an argument that incumbents benefit from a worst-case analysis?
1. Add a question about IRFA/FIRFA – how to keep the agency from implementing it in a manner that does take it seriously.

**Anna M. Gomez**  
**FCC Hispanic Heritage Month Remarks**  
**September 30, 2016**

Buenos dias!

Thank you Olga for that kind introduction.

And thank you to the Office of Workplace Diversity for the invitation to speak with you today.

I can't tell you how honored I was to be asked to be your speaker this year.

- The FCC holds a dear spot in my heart.
  - I worked with many of you when I was here at the FCC, and I spent many interesting, challenging, and fun years working in this wonderful place.
  - I truly felt like I was with family here.

Each year, we observe National Hispanic Heritage month to celebrate the histories, cultures, and contributions of American citizens whose ancestors are Latino or Hispanic.

- Latinos and Hispanics have made important contributions – which is why I also find it humbling to be asked to speak with you today.

I am proud to be a Latina.

- I am the daughter of a Colombian who became a naturalized American citizen over 50 years ago,
  - My mother was born in Columbia, SC – so I like to say I'm 100% Colombian!

- I also grew up in Colombia.
  - My parents moved us there when I was a baby, and we stayed there until I was 14.
  - My extended family lived nearby, including my Grandmother, who we called Granita, and my grandfather, Pachito.
  - And my cousins, all of whose names begin with Maria, in keeping with my family's Colombian Catholic tradition.
    - So my cousins are Maria Juanita, Maria Carolina, Maria Lucia, Maria Francis, Maria Victoria, and just plain Maria.
    - And then my mother goes and names me Anna Marie!
- We moved to the United States when I was 14 years old.
  - I suffered such culture shock!
  - The US was so different — different music, different past times, different lingo.
    - I'd like to say that it was a smooth transition, but I was teased mercilessly by my classmates for having an accent and for being different.
      - That lasted only about a year, thank goodness, but that year of torture was long enough.
- My experience made me very sensitive to the importance of inclusiveness.
  - I have great empathy for people who are considered “different” or who are just entering a new culture.
    - It's difficult and intimidating.
    - So please keep that in mind when you have new colleagues entering the workforce, or you have a new neighbor or a new club mate.
- As may be obvious to you, I have adapted to American culture over the past 30-some years.
  - But I don't ever want to forget my Colombian heritage.
  - It is as big a part of me as being a woman or an attorney.

- It is part of who I am and I carry it with me every day. With pride.

But our goal should not be assimilation – it should be inclusion. Those are two very different things.

- Assimilation makes it sound like you change to fit in to an existing culture.
- Inclusion, on the other hand, involves bringing together and harnessing diverse forces and resources.
  - Inclusion means creating an environment of involvement, respect, and connection that benefits from where the richness of ideas, backgrounds, and perspectives that diverse individuals bring.
- And you millennials out there are the prototype example of a generation that values inclusion.
- Good for you!

- Now one thing about being Latino is I am constantly asked to represent my culture and my heritage.

- I have been asked to lead or participate in Diversity initiatives in almost every job I have held.
  - At NTIA I helped create the Diversity and Inclusion Council.
  - At Wiley Rein I Chair the Firm's Diversity and Inclusion Committee.
  - At Sprint I helped lead diversity training for the Government Affairs Group.
  - I led the Latino law student mentoring program at my first Firm.
  - And here at the FCC I participated in an interagency working group on Hispanics in the workplace.
- But I enjoy doing that, because I am an enthusiastic supporter of diversity and inclusion
  - As President Obama said, "We are at our best when we draw on the talents of all parts of our society, and our greatest accomplishments are

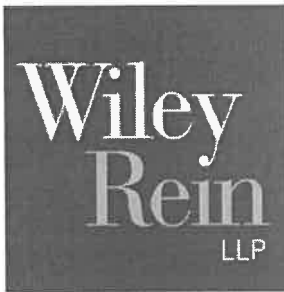
achieved when diverse perspectives are brought to bear to overcome our greatest challenges.

- So recognizing the contributions that Hispanics and Latinos have made to the United States is an important way that we can ensure more inclusion in our lives of diverse cultures and people.
- Therefore, I commend the FCC for holding these events, and I comment all of you for participating.
- So now I feel like I need to leave you with something inspirational.
  - To do that, I will borrow from someone else.
    - Many years ago – in fact it would have been in the last century – then U.S. attorney general spoke to the D.C. Hispanic Bar at its annual Equal Justice Awards Ceremony.
      - I have never forgotten the premise of her remarks: she told us – Never lose your idealism.
      - At that time, I was an attorney at the FCC, and it really struck a chord with me.

We should all strive to remember our idealistic roots.

- Working in Washington can really wear that idealism down, but we should fight against that.
- By working at the FCC, you are serving every citizen of this country.
- Please remember that – and remember that each and every one of you contributes to the country.
- Whether you are enabling new innovative services, or are protecting consumers, or are providing information to the public – you are an important component of what we call public service.
- I hope you will see your role in the bigger, idealistic picture.

Thank you very much for allowing me to be a part of your celebration.



# FirstNet: Opt-In/Opt-Out Provisions

March 29, 2017

**Anna M. Gomez**

Partner  
202.719.7261  
[agomez@wileyrein.com](mailto:agomez@wileyrein.com)

## Overview

- Middle Class Tax Relief and Job Creation Act of 2012 Provisions
  - FirstNet
  - Governors
  - Opt Out Process
- Recent FCC and NTIA Actions
- Process and Timeline

## Middle Class Tax Relief and Job Creation Act Provisions: FirstNet

- Steps before “opt in/opt out” decision:
  1. FirstNet completes the RFP process
  2. FirstNet notifies each Governor of:
    - Completion of the RFP process;
    - Proposed plan for build-out in the State; and
    - Funding levels for the State as determined by NTIA



## Middle Class Tax Relief and Job Creation Act Provisions: FirstNet (cont'd)

- FirstNet State Plans
  - Web-based portal
  - FirstNet's approach to deploying the RAN
    - Planned phases of deployment;
    - Network policies; and
    - Services and capabilities to be provided in each state

## Middle Class Tax Relief and Job Creation Act — Governor

- Within 90 days after FirstNet notification, Governor must choose whether his/her state will:
  - Participate in the deployment of the NPSBN as proposed by FirstNet; or
  - Deploy its own radio access network (RAN) in the State
- If a state decides to opt out, Governor must notify FirstNet, NTIA, and the FCC

## Middle Class Tax Relief and Job Creation Act – Opt Out Process

- 180 days to develop/complete RFP for the construction, maintenance, and operation of State RAN
- Within same 180 days, submit alternate plan to the FCC demonstrating:
  - That the State will comply with the minimum technical interoperability requirements; and
  - Interoperability with the NPSBN
- If the FCC approves the plan:
  - State may apply to NTIA for a grant to construct the RAN
  - State shall apply to NTIA for spectrum lease with FirstNet

## Middle Class Tax Relief and Job Creation Act – Opt Out (cont'd)

- To obtain a grant/lease, the State must show it has:
  - Technical ability to operate/funding to support the RAN;
  - Ability to maintain interoperability with the NPSBN;
  - Ability to complete the RAN within comparable timelines;
  - Cost-effectiveness of the State plan; and
  - Comparable security, coverage, and quality of service
- “Opt-out” States must pay any user fees for State use of elements of the FirstNet core network
- If the FCC disapproves the plan, FirstNet shall proceed with its original network deployment plan

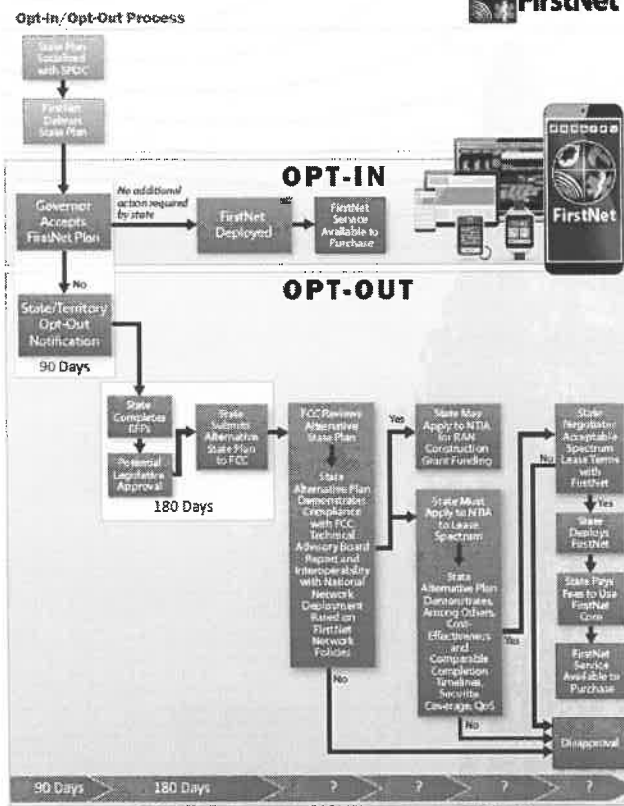
## Recent FCC and NTIA Actions

- FCC
  - NPRM on Procedures for Review of Opt-Out Requests
  
- NTIA
  - Preliminary Guidance and Request for Comments
  - Federal Financing Opportunity Notice
    - Will provide details on application spectrum lease and grant program requirements
    - NTIA will issue no later than the date FirstNet delivers state plan

## Timeline

- FirstNet completes RFP process and notifies States
- 90 days after notification – Governor decision, notify FirstNet, NTIA, FCC
  - Opt-in – FirstNet issues purchase order to network partner
  - Opt-out – deployment delayed until completion of next steps
- 180 days after notification – complete state RFP process and submit alternative plan to FCC for approval
  - No timeline for FCC decision
- If FCC approves, submit request to NTIA for grant and FirstNet spectrum lease
  - No timeline for NTIA decision
  - FFO will establish filing deadline, tentatively 60 days after FCC approval
- If FCC disapproves, FirstNet moves forward

# FirstNet Timeline



Questions? Contact FirstNet at [info@firstnet.gov](mailto:info@firstnet.gov) | [www.firstnet.gov](http://www.firstnet.gov) | 202-665-8100





***Thank you***

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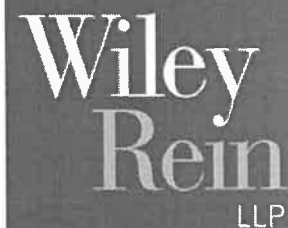




# Increased Coverage with Aerial Communications – Drones, Satellite and more

I.W.C.E. 2017

W-34



## Increased Coverage with Aerial Communications – Drones, Satellite and More

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**Anna M. Gomez**

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202.719.7261



## Alternative Coverage Methods

- Cells on Wheels (COWs)
- Flying COWs
- Satellites
- Balloons
- “Stratospheric Airships”

# Presenters

**Clifton Basnight**

Global Channel Manager  
Thales Defense and Security Inc.

**Tom Brinkoetter**

Consultant  
Anritsu Company

**Ben D. Holycross**

Radio Systems Manager  
Polk County Division of Emergency  
Management

**Casey Joseph**

Vice President of Sales and Business Development  
LS telcom, Inc.

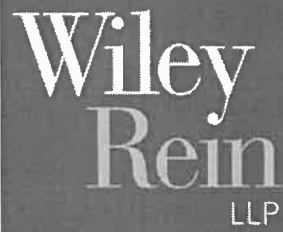
**Gerald Knoblach**

Chairman & CEO  
Space Data Corporation

**Jinger Zeng**

CEO  
Dronesmith Technologies, Inc.





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**FCBA FirstNet CLE**

**2017**

1. All: Background from each panelist on what Spectrum Act/FirstNet means to you (this is for those in audience that don't really know FirstNet/the Spectrum Act provisions).
2. Jason: How does FirstNet interpret being an independent authority? Describe FirstNet's relationship with the Department of Commerce, NTIA, and the FCC.
3. Stephanie: AT&T is undertaking a very risky and complicated endeavor. What prepared AT&T to assume this role?
4. Jeff: How do you view FirstNet is doing in fulfilling the FirstNet legislation crafters' vision for FirstNet? What do you see are the implications of a state opting out?
5. Jeff: Commenters are urging the FCC to streamline its review of opt-out state alternative plans. What do you think is the Act's purpose for the FCC's review?
6. Marsha: Opt-out states must also present their alternative plans to NTIA to get approved to seek a spectrum lease by FirstNet, and to qualify for a grant for their capital expenditures. How detailed will be the necessary showings by the state opt out plans? Will you use the FirstNet state plan template as a basis for your review?
7. All: The process as we know it is that FirstNet/AT&T will develop draft state plans and provide them to the states some time this summer. In the fall, FirstNet/AT&T will provide the governors the final state plans, which will trigger the 90-day deadline for governors to choose whether to opt out of the FirstNet RAN deployment within their states/territories. What happens in between all of this? Does FirstNet begin providing service, such as via the early builders, or via states that choose to opt in early?

8. Stephanie: What exactly is a Covered Leasing Agreement under the Act?
9. Jason: There are some incumbent operations in the FirstNet spectrum today. FirstNet is relocating some 700 MHz narrowband users – how is that progressing? What about the early builders? What will happen with them now that FirstNet has awarded its contract?
10. Jason: What is FirstNet's process for entertaining requests for experimental authority in Band 14? Stephanie: Will AT&T be involved in those requests once AT&T has access to the spectrum capacity and is providing service in Band 14?
11. All: Many of the legal issues with FirstNet are matters of first impression. Can you give me some examples of issues that presented challenges for you?
12. Jason: Although FirstNet is exempt from the Administrative Procedure Act, it nevertheless issued a number of preliminary and then interpretations of the FirstNet statutory provisions. Do you foresee FirstNet issuing any additional legal interpretations?
13. Jeff: APCO is a strong supporter of transitioning to next generation 911. While FirstNet is not directly responsible for that transition, it does play an important role. Can you tell us about APCO's vision for FirstNet and NG911 and what you hope you see in the near future?

**BIOS**

**Stephanie Baldanzi**

**Senior Legal Counsel, AT&T**

- Spent most of her 18 years at AT&T supporting AT&T federal government contracts law, spends much of her time on FirstNet
- Before that, she spent a number of years at Ober Kaler Grimes & Shriver
- BA – Dartmouth, JD from GWU law

**Jeff Cohen**

**Chief Counsel, APCO International**

- Prior to joining APCO, served as FCC detailee to the minority staff of the House Energy and Commerce Committee, and was one of the authors of the FirstNet legislation
- At FCC, Jeff served as Senior Legal Counsel to the Chief of the FCC's Pub Safety and HLS Bureau
- Prior to that, Jeff served as Partner at Wilkinson Barker

**Jason Karp**

**Chief Counsel, FirstNet**

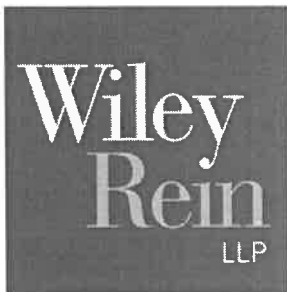
- Prior to FirstNet, served as Director of Legal Services at Accenture
- Prior to Accenture, held senior roles with the FCC, Net2000 Communications, MCI, Kelley Drye and Warren, and E-Centives.
- Jason has a BSE in Electrical Engineering from Duke University and a JD from NYU

**Marsha MacBride**

**Associate Administrator for the Office of Public Safety Communications, NTIA**



- Prior to being named to run the Office of Public Sferty, Marsha also served as special advisor to the NTIA Administrator where she oversaw NTIA's policy and international offices..
- Marsha practiced law for six years before joining the FCC, where she spent 12 years in various roles, including as Chief of Staff to former Chairman Michael Powell.
- Marsha also served as Executive Vice President at the National Association for Broadcasters.
- Marsha has a JD from GWU Law and a BA from Douglass College, Rutgers University.



## FirstNet: Developments, Challenges, and Opportunities in the Nationwide Public Safety Broadband Network

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## **First Responder Network Authority (FirstNet)**

- Nationwide public safety broadband network (NPSBN)
- FirstNet must work with public safety, federal agencies, states, territories, and localities
- Governors, NTIA and the FCC have important roles
- FirstNet awarded its contract

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# Presenters

**Stephanie Baldanzi**

Senior Legal Counsel  
AT&T

**Jeff Cohen**

Chief Counsel  
APCO

**Jason Karp**

Chief Counsel  
FirstNet

**Marsha MacBride**

Associate Administrator, Office of Public  
Safety  
National Telecommunications and  
Information Administration





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## **Anna M. Gomez**

### **Additional Writings**

1. Columbia Communications Corporation, Memorandum Opinion and Order, October 18, 1999, <https://docs.fcc.gov/public/attachments/DA-00-702A1.pdf>
2. Thomson Consumer Electronics, Inc. Part 68 Waiver Request, Order, September 16, 1998, <https://docs.fcc.gov/public/attachments/DA-98-1867A1.pdf>
3. 1 DAY UNTIL DTV TRANSITION, Public Notice, June 11, 2009, <https://docs.fcc.gov/public/attachments/DOC-291357A1.pdf>
4. United States Department of State Request for Modification, Memorandum Opinion and Order, August 19, 2004, <https://docs.fcc.gov/public/attachments/DA-04-2592A1.pdf>
5. Letter to North American Power Brokers, May 19, 1999, <https://docs.fcc.gov/public/attachments/DA-99-958A1.pdf>
6. New York Department of Public Service Petition for Expedited Waiver, Order, December 4, 1998, <https://docs.fcc.gov/public/attachments/DA-98-2310A1.pdf>
7. North American Numbering Plan, Order, December 30, 1998, <https://docs.fcc.gov/public/attachments/DA-98-2648A1.pdf>
8. Ameritech Petition for LATA Boundary Modification, Memorandum Opinion and Order, June 4, 1999, <https://docs.fcc.gov/public/attachments/DA-98-2648A1.pdf>
9. US West Petition for LATA Boundary Modification, June 4, 1999, <https://docs.fcc.gov/public/attachments/DA-99-1075A1.pdf>

10. Malheur Home Telephone Company Petition for LATA Boundary Modification, June 4, 1999, <https://docs.fcc.gov/public/attachments/DA-99-1076A1.pdf>
11. BellSouth Petition for LATA Boundary Modification, March 19, 1999, <https://docs.fcc.gov/public/attachments/DA-99-526A1.pdf>
12. US WEST, Toledo Telephone, and Washington Utilities and Transportation Commission Petition for LATA Boundary Modification, July 2, 1999, <https://docs.fcc.gov/public/attachments/DA-99-1307A1.pdf>
13. Bell Atlantic Petition for LATA Boundary Modification, March 29, 1999, <https://docs.fcc.gov/public/attachments/DA-99-558A1.pdf>
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15. Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, Order, December 31, 1998, <https://docs.fcc.gov/public/attachments/DA-98-2644A1.pdf>
16. Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Order, April 22, 1999, <https://docs.fcc.gov/public/attachments/DA-99-781A1.pdf>
17. Columbia Communications Corporation, Memorandum Opinion and Order, April 5, 2000, <https://docs.fcc.gov/public/attachments/DA-00-702A1.pdf>

### **Additional Speeches, Panel Discussions, and Presentations**

1. Silicon Flatirons, The Internet's Midlife Crisis | Fireside Chat: Alan Davidson & Anna Gomez, <https://www.youtube.com/watch?v=LY-2A7i88m8>
2. High Tech Forum Podcast, August 5, 2022, <https://www.youtube.com/watch?v=Sr0kCWhvcag>

3. Silicon Flatirons, Risk Assessment in Spectrum Policy Panel, October 26, 2015,  
[https://www.youtube.com/watch?embeds\\_referring\\_uri=https%3A%2F%2Fnortonsafe.search.ask.com%2F&source\\_ve\\_path=MzY4NDIsMjg2NjQsMTY0NTA2&feature=emb\\_share&v=iD05Jc3Y1x4](https://www.youtube.com/watch?embeds_referring_uri=https%3A%2F%2Fnortonsafe.search.ask.com%2F&source_ve_path=MzY4NDIsMjg2NjQsMTY0NTA2&feature=emb_share&v=iD05Jc3Y1x4) (begin at 24:41).
4. Federal Infrastructure Investments in Latino Communities: Broadband, July 26, 2021,  
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5. Interview with Anna M. Gomez, Attorney at law, Partner, Wiley Rein LLP, USA, November 17, 2014,  
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6. MMTC, Entrepreneurial Opportunities with the Federal Government, August 2, 2012, <https://www.youtube.com/watch?v=EW7ARcpGRaY> (begin at 2:43)
7. Silicon Flatirons, Taking Stock - Progress and Challenges, September 16, 2016, <https://www.youtube.com/watch?v=vSNUbmDwJdo> (begin 15:23)
8. NTIA ISART Conference, May 6, 2022,  
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9. Silicon Flatirons Spectrum Policy Initiative, October 14, 2022,  
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10. MMTC Broadband Adoption Luncheon, Aug 15, 2011,  
[https://www.youtube.com/watch?v=yupa\\_Vn31PM](https://www.youtube.com/watch?v=yupa_Vn31PM) (begin 52:28)
11. Public Knowledge Back to the Spectrum Future, June 2022,  
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12.AUVSI, Understanding the Why and How of Unmanned Systems in Engineering and Construction Firms Webinar, March 2020,  
<https://www.youtube.com/watch?v=aIvqloQcSYk> (begin at 29:57)