

**Congress of the United States**  
**Washington, DC 20515**

256

April 30, 2019

The Honorable Ajit Pai  
Chairman  
Federal Communications Commission  
445 12<sup>th</sup> St., SW  
Washington, DC 20554

RE: Protecting Incumbents from harmful interference in the 6 GHz band, ET Docket No. 18-295

Dear Chairman Pai:


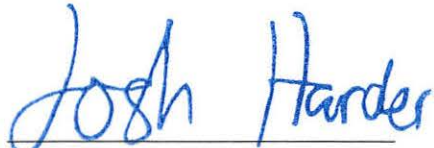



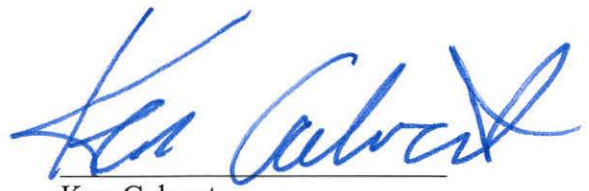

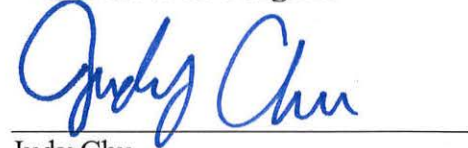
As the Federal Communications Commission (FCC) solicits comments on its Notice of Proposed Rulemaking which would allow unlicensed spectrum sharing in the 6 GHz band, we urge you to ensure that incumbent license holders, especially those critical infrastructure owners and operators which use the band for mission-critical communications, are protected from the harmful interference that could be caused by unlicensed spectrum sharing. Over the past few months, we have heard from our electric and water utilities about the proposed rulemaking and the detrimental impact interference from new unlicensed users could have on the provisioning of reliable utility services. Given the importance of utility services for our economic and national security, we encourage the Commission to carefully craft technical specifications to ensure the adequate protection of utilities and other critical infrastructure owners and operators' communications networks from harmful interference.

Electric and water utilities use the 6GHz band for their mission critical communications networks, including routine reliability, emergency response, storm restoration, and general situation awareness. The 6GHz band provides utilities and other critical infrastructure industries (CII) with high-speed, long distance wireless communications required for these essential services. The 6 GHz band is uniquely suited to deliver the long-distance, low latency communications utilities and other critical infrastructure industries need. Interference on a utility's communication network reduces their ability to respond to problems or abnormalities within their service territory, reducing their situational awareness and potentially compromising utility reliability. Interference to these mission critical communications systems would pose an unacceptable risk.

We are well aware that our nation's need for spectrum is growing as the number of wireless networks and devices proliferate, and we appreciate the Commission's continued efforts to ensure the efficient and effective use of spectrum. Commercial wireless users have multiple spectrum options for their service, while, utilities and other users in the 6 GHz band will have few if any other bands should they be forced to relocate. We urge the FCC to carefully consider how best to implement an automated frequency coordination (AFC) system to ensure that it performs effectively and protects important incumbent operations.

Given the importance of essential energy and water services to our nation's wellbeing, we encourage you to consider how this proposal could impact the critical infrastructure industries who rely on the 6 GHz band for their vital communications network's and ensure adequate protection from harmful interference.

Sincerely,

  
Jim Costa  
Member of Congress  
Josh Harder  
Member of Congress  
Adam B. Schiff  
Member of Congress  
TJ Cox  
Member of Congress  
Nanette Barragán  
Member of Congress  
Lucille Roybal-Allard  
Member of Congress  
Juan Vargas  
Member of Congress  
Ken Calvert  
Member of Congress  
Raul Ruiz, M.D.  
Member of Congress  
Doug LaMalfa  
Member of Congress  
Harley Rouda  
Member of Congress  
Grace Napolitano  
Member of Congress  
Judy Chu  
Member of Congress



OFFICE OF  
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable Lucille Roybal-Allard  
U.S. House of Representatives  
2083 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congresswoman Roybal-Allard:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

As an initial matter, unlicensed operations relying on Wi-Fi and other technical standards have become highly popular among consumers seeking to connect wirelessly to the Internet using countless devices—and have become a critical component of the mobile wireless ecosystem. The Commission's October 2018 Notice of Proposed Rulemaking proposed allowing unlicensed use of the 6 GHz band while ensuring that the licensed services operating in the spectrum would continue to thrive. Expanding use of this spectrum will advance the Commission's efforts to make broadband connectivity available to all Americans, especially those in rural and underserved areas.

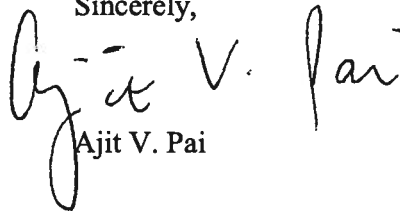
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Page 2—The Honorable Lucille Roybal-Allard

I appreciate your sharing your views on this proceeding and can assure you that as we examine the record, we will take those views into account. Please let me know if I can be of further assistance.

Sincerely,

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Ajit V. Pai





OFFICE OF  
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable Adam B. Schiff  
U.S. House of Representatives  
2269 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Schiff:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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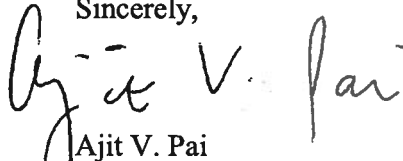
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Page 2—The Honorable Adam B. Schiff

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Sincerely,



Ajit V. Pai



OFFICE OF  
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable Doug LaMalfa  
U.S. House of Representatives  
322 Cannon House Office Building  
Washington, D.C. 20515

Dear Congressman LaMalfa:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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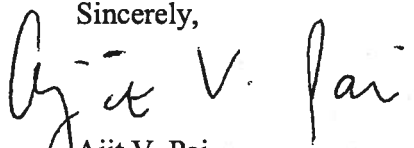
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Page 2—The Honorable Doug LaMalfa

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Sincerely,



Ajit V. Pai





FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

OFFICE OF  
THE CHAIRMAN

May 23, 2019

The Honorable Grace F. Napolitano  
U.S. House of Representatives  
1610 Longworth House Office Building  
Washington, D.C. 20515

Dear Congresswoman Napolitano:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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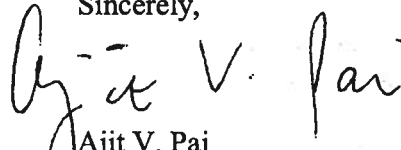
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Page 2—The Honorable Grace F. Napolitano

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Sincerely,

  
Ajit V. Pai



FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

OFFICE OF  
THE CHAIRMAN

May 23, 2019

The Honorable Harley Rouda  
U.S. House of Representatives  
2300 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Rouda:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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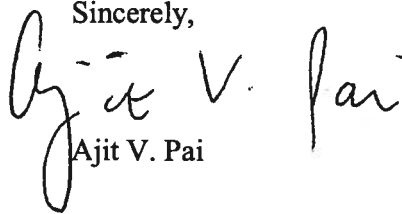
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Page 2—The Honorable Harley Rouda

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Ajit V. Pai



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THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable Jim Costa  
U.S. House of Representatives  
2081 Rayburn House Office Building  
Washington, D.C. 20515

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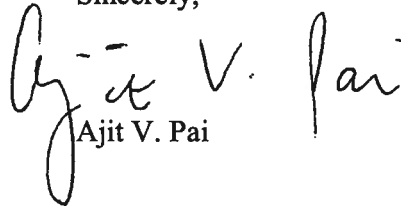
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Ajit V. Pai





FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

OFFICE OF  
THE CHAIRMAN

May 23, 2019

The Honorable Josh Harder  
U.S. House of Representatives  
131 Cannon Office Building  
Washington, D.C. 20515

Dear Congressman Harder:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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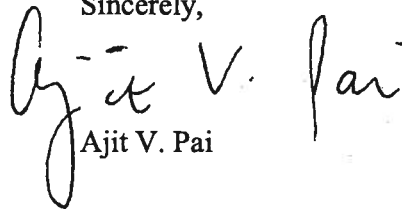
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Page 2—The Honorable Josh Harder

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Sincerely,

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Ajit V. Pai



FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

OFFICE OF  
THE CHAIRMAN

May 23, 2019

The Honorable Juan C. Vargas  
U.S. House of Representatives  
2244 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Vargas:

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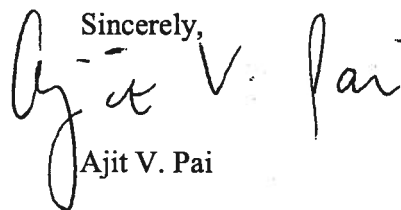
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Page 2—The Honorable Juan C. Vargas

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Ajit V. Pai



FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

OFFICE OF  
THE CHAIRMAN

May 23, 2019

The Honorable Judy Chu  
U.S. House of Representatives  
2423 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congresswoman Chu:

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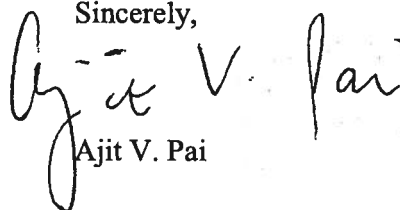
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Page 2—The Honorable Judy Chu

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Ajit V. Pai





OFFICE OF  
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable Ken Calvert  
U.S. House of Representatives  
2205 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Calvert:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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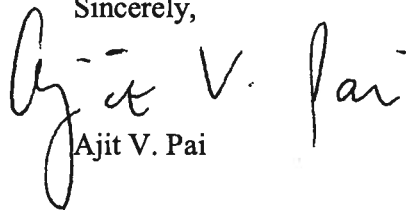
In order to minimize any potential harmful interference, we proposed rules for two types of unlicensed devices tailored to protect incumbent services that operate in distinct parts of the 6 GHz band. In the 5.925-6.425 GHz and 6.525-6.875 GHz sub-bands, unlicensed devices would only be allowed to transmit under the control of an automated frequency control (AFC) system. These frequencies are heavily used by point-to-point microwave links (such as oil rigs and utilities) and some fixed-satellite systems. The AFC system would identify frequencies on which unlicensed devices could operate without causing harmful interference to fixed point-to-point microwave receivers.

In the remainder of the 6 GHz band—that is, the 6.425-6.525 GHz and 6.875-7.125 GHz sub-bands—unlicensed devices would be restricted to indoor use and would operate at lower power, without an AFC system. These frequencies are used for mobile services, such as the Broadcast Auxiliary Service and Cable Television Relay Service, as well as fixed-satellite services. Because technical aspects of these mobile services make the use of an AFC system impractical, the FCC has proposed a combination of lower-power and indoor operations, which would protect licensed services operating on these frequencies from harmful interference.

Page 2—The Honorable Ken Calvert

I appreciate your sharing your views on this proceeding and can assure you that as we examine the record, we will take those views into account. Please let me know if I can be of further assistance.

Sincerely,

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Ajit V. Pai



OFFICE OF  
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable Nanette Barragan  
U.S. House of Representatives  
1030 Longworth House Office Building  
Washington, D.C. 20515

Dear Congresswoman Barragan:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

As an initial matter, unlicensed operations relying on Wi-Fi and other technical standards have become highly popular among consumers seeking to connect wirelessly to the Internet using countless devices—and have become a critical component of the mobile wireless ecosystem. The Commission's October 2018 Notice of Proposed Rulemaking proposed allowing unlicensed use of the 6 GHz band while ensuring that the licensed services operating in the spectrum would continue to thrive. Expanding use of this spectrum will advance the Commission's efforts to make broadband connectivity available to all Americans, especially those in rural and underserved areas.

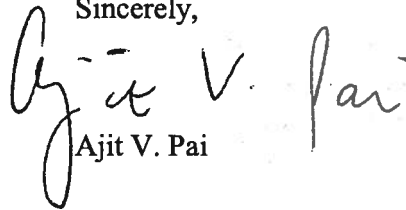
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Page 2—The Honorable Nanette Barragan

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Ajit V. Pai



OFFICE OF  
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable Raul Ruiz  
U.S. House of Representatives  
2342 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Ruiz:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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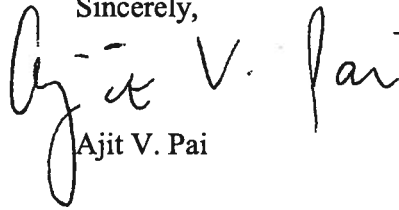
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Page 2—The Honorable Raul Ruiz

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Ajit V. Pai





OFFICE OF  
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON

May 23, 2019

The Honorable TJ Cox  
U.S. House of Representatives  
1728 Longworth House Office Building  
Washington, D.C. 20515

Dear Congressman Cox:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

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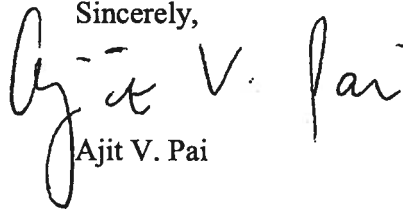
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