

# **Telecommunications: CRS Products**

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### **SUMMARY**

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## **Telecommunications: CRS Products**

Telecommunications infrastructure and programs have a long history of congressional interest and present several issues for policymakers, including those related to fifth-generation (5G) and next-generation technologies, broadband deployment, emergency communications infrastructure, undersea cables, secure and trusted networks, and spectrum management.

To help provide context for considering legislative proposals and questions about agency authorities, this report compiles a selection of CRS products on enacted and proposed legislation; agency authorities; court actions; and telecommunications-related policies, programs, and technologies.

For an overview of telecommunications issues of potential interest to the 119<sup>th</sup> Congress, see CRS In Focus IF12955, *Telecommunications and the 119th Congress: A Primer on Programs, Authorities, and Emerging Issues*, coordinated by Colby Leigh Pechtol.

Additional CRS products are grouped by title in the following categories:

**Select Agency Information**—products about the three main agencies with telecommunications-related authorities: the Federal Communications Commission (FCC), the National Telecommunications & Information Administration (NTIA), and the U.S. Department of Agriculture (USDA).

**Specific Telecommunications Programs or Provisions in Legislation**—products that cover issues related to specific broadband programs or provisions in legislation.

#### **Telecommunications Technologies:**

- 5G—products that cover 5G wireless technologies and use cases.
- Broadband—products that cover issues related to high-speed internet services, also known as broadband, and wired technologies such as fiber.
- **Spectrum**—products that cover issues related to the electromagnetic spectrum for communications technologies, such as radio and mobile networks.
- **Robocalls**—products that cover robocall technologies and anti-robocall initiatives.
- Undersea Cables—products that cover issues related to undersea, or submarine, telecommunications
  cables.

#### **Telecommunications Issues:**

- **Digital Divide**—products that cover aspects related to the gap in broadband service between those who have access to broadband service and those who do not.
- Public Safety—products that cover emergency communications infrastructure, such as emergency alerts and 911.
- National Security—products that cover national security risks to communications equipment and systems.
- Net Neutrality—products that cover the net neutrality debate and associated legal and policy issues.
- Universal Service—products that cover programs that support the principle that all Americans should have access to communications services, including telephone and broadband services.

**Other Topics**—products that cover telecommunications topics in categories other than those previously listed, such as federal assistance programs, lead-sheathed cables, and decommissioning networks.

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## **Selected Telecommunications CRS Products**

## **Select Agency Information**

### **Federal Communications Commission (FCC)**

CRS Report R45699, *The Federal Communications Commission: Structure, Operations, and Budget*, by Patricia Moloney Figliola (or, in video form, CRS Video WVB00745, *The Federal Communications Commission: Structure, Operations, and Budget*, by Patricia Moloney Figliola)

CRS In Focus IF12754, Federal Communications Commission: Agency Regulatory Authority and Selected Rules, by Colby Leigh Pechtol, Patricia Moloney Figliola, and Peter J. Benson

CRS In Focus IF12513, FCC Adopts Proposed Net Neutrality Rule, by Chris D. Linebaugh and Patricia Moloney Figliola

CRS Report R47578, *The Federal Communications Commission's Spectrum Auction Authority: History and Options for Reinstatement*, by Patricia Moloney Figliola and Jill C. Gallagher

CRS Legal Sidebar LSB10895, New FCC Rules Ban Authorizations for Equipment Posing National Security Risks, by Chris D. Linebaugh

CRS In Focus IF12298, FCC's National Broadband Map: Implications for the Broadband Equity, Access, and Deployment (BEAD) Program, coordinated by Colby Leigh Pechtol

CRS Report R47258, FCC Spectrum Auction Authority: Background and Proposals for Extension, by Jill C. Gallagher and Patricia Moloney Figliola (or, in video form, CRS Video WVB00639, Science and Technology Series: FCC Spectrum Auction Authority)

CRS Report R47192, *The Federal Communications Commission: Selected Issues Under Consideration*, coordinated by Patricia Moloney Figliola

CRS Report R46736, Stepping In: The FCC's Authority to Preempt State Laws Under the Communications Act, by Chris D. Linebaugh and Eric N. Holmes (or, in video form, CRS Video WVB00414, Stepping In: The FCC's Authority to Preempt State Laws Under the Communications Act)

#### National Telecommunications and Information Administration (NTIA)

CRS Report R47075, *The National Telecommunications and Information Administration (NTIA): Current Roles and Programs*, by Ling Zhu

## U.S. Department of Agriculture (USDA)

CRS Report R48046, *USDA Rural Utilities Service's Support for Tribes and Other Indigenous Entities*, by Lisa S. Benson and Mariel J. Murray

CRS Report R47017, USDA's ReConnect Program: Expanding Rural Broadband, by Lisa S. Benson

## Specific Telecommunications Programs or Provisions in Legislation

CRS In Focus IF12955, *Telecommunications and the 119th Congress: A Primer on Programs, Authorities, and Emerging Issues*, coordinated by Colby Leigh Pechtol

CRS In Focus IF12041, Farm Bill Primer: Rural Broadband Provisions, by Lisa S. Benson

CRS In Focus IF12429, Broadband Equity, Access, and Deployment (BEAD) Program: Issues and Congressional Considerations, by Ling Zhu

CRS In Focus IF11918, Infrastructure Investment and Jobs Act: Funding for USDA Rural Broadband Programs, by Lisa S. Benson

CRS Report R46967, The Infrastructure Investment and Jobs Act (P.L. 117-58): Summary of the Broadband Provisions in Division F, coordinated by Patricia Moloney Figliola

CRS In Focus IF11901, The Digital Equity Act of 2021, by Patricia Moloney Figliola

## **Telecommunications Technologies**

#### 5G

Relevant products are also listed in the "Spectrum" section.

CRS In Focus IF12465, 5G Fund for Rural America: Current Status and Issues, by Jill C. Gallagher

CRS Video WVB00456, 5G Technology Update: Issues for 117th Congress, by Jill C. Gallagher

CRS In Focus IF12046, National Spectrum Policy: Interference Issues in the 5G Context, by Ling Zhu

CRS In Focus IF12028, Aviation Concerns Regarding the Rollout of 5G Wireless Telecommunications Networks, by Bart Elias

CRS Legal Sidebar LSB10265, Overview of Legal Challenges to the FCC's 5G Order on Small Cell Siting, by Chris D. Linebaugh

CRS Report R45485, Fifth-Generation (5G) Telecommunications Technologies: Issues for Congress, by Jill C. Gallagher and Michael E. DeVine

#### **Broadband**

CRS Report R47883, Federal Funding for Broadband Deployment: Agencies and Considerations for Congress, coordinated by Colby Leigh Pechtol

CRS In Focus IF12441, Fixed Technologies Used to Deliver Broadband Service: A Primer and Considerations for Congress, by Colby Leigh Pechtol

CRS Report R45962, *Broadband Data and Mapping: Background and Issues for the 117th Congress*, by Colby Leigh Pechtol

#### Robocalls

CRS Legal Sidebar LSB10594, What Is an Autodialer (Part II)? The Supreme Court (Mostly) Resolves a Robocall Enforcement Question, by Eric N. Holmes

CRS Video WVB00263, Robocalls: Background, Government Activity and Enforcement, and Current Challenges, by Patricia Moloney Figliola

CRS Report R45070, Protecting Consumers and Businesses from Fraudulent Robocalls, by Patricia Moloney Figliola

## Spectrum

Relevant products are also listed in the "Federal Communications Commission (FCC)," "National Telecommunications and Information Administration (NTIA)," "5G," and "Public Safety" sections.

CRS Video WVB00772, FCC Spectrum Auction Authority, by Patricia Moloney Figliola and Jill C. Gallagher

CRS In Focus IF12552, *The National Spectrum Strategy for Wireless Technologies: Priorities, Objectives, and Congressional Considerations*, by Ling Zhu

CRS Insight IN12023, National Academies of Sciences, Engineering, and Medicine Report on Ligado Networks and the Interference Debate, by Jill C. Gallagher

CRS In Focus IF12350, *Repurposing 3.1-3.55 GHz Spectrum: Issues for Congress*, by Jill C. Gallagher

CRS Video WVB00471, National Spectrum Policy: Concepts, Issues, and Options for Congress, by Jill C. Gallagher and Ling Zhu

CRS Report R46564, Overview of Department of Defense Use of the Electromagnetic Spectrum For additional information, congressional offices may contact Kelley Sayler.

CRS In Focus IF11260, Smart Cars and Trucks: Spectrum Use for Vehicle Safety, by Bill Canis and Jill C. Gallagher

CRS In Focus IF11558, Spectrum Interference Issues: Ligado, the L-Band, and GPS, by Jill C. Gallagher, Alyssa K. King, and Clare Y. Cho

### **Undersea Cables**

CRS Report R47648, *Protection of Undersea Telecommunication Cables: Issues for Congress*, coordinated by Jill C. Gallagher and Nicole T. Carter

CRS Report R47237, Undersea Telecommunication Cables: Technology Overview and Issues for Congress, by Jill C. Gallagher

#### **Telecommunications Issues**

## Digital Divide

CRS Report R47506, *The Persistent Digital Divide: Selected Broadband Deployment Issues and Policy Considerations*, by Colby Leigh Pechtol

CRS In Focus IF12111, Bridging the Digital Divide: Broadband Workforce Considerations for the 118th Congress, by Colby Leigh Pechtol

CRS Report R47225, Expanding Broadband: Potential Role of Municipal Networks to Address the Digital Divide, by Colby Leigh Pechtol

CRS In Focus IF12030, *The Broadband Digital Divide: What Comes Next for Congress?*, by Colby Leigh Pechtol

CRS Report R46613, *The Digital Divide: What Is It, Where Is It, and Federal Assistance Programs*, by Colby Leigh Pechtol

## **Public Safety**

CRS In Focus IF12766, 4.9 GHz Public Safety Band: Competing Views on Use, by Jill C. Gallagher

CRS Report R48363, *The Integrated Public Alert and Warning System (IPAWS): Primer and Issues for Congress*, by Amanda H. Peskin

CRS In Focus IF12717, CrowdStrike IT Outage: Impacts to Public Safety Systems and Considerations for Congress, by Colby Leigh Pechtol and Jill C. Gallagher

CRS Video WVB00739, Science and Technology Q&A: Next Generation 911, by Emily G. Blevins and Colby Leigh Pechtol (or, in podcast form, CRS Report WPD00120, Science and Technology Q&A: Next Generation 911, by Emily G. Blevins and Colby Leigh Pechtol)

CRS In Focus IF12779, *Restoration of Cell Phone Services: Hurricane Helene*, by Jill C. Gallagher and Amanda H. Peskin

CRS In Focus IF12747, 911 Telecommunicator Reclassification: Status and Considerations for Congress, by Colby Leigh Pechtol

CRS Report R48015, Funding the Transition to Next Generation 911 (NG911): Considerations for Congress, by Colby Leigh Pechtol

CRS In Focus IF12613, *AT&T Network Outage: Impact on Public Safety Services*, by Jill C. Gallagher and Colby Leigh Pechtol

### **National Security**

Relevant products are also listed in the "Federal Communications Commission (FCC)" section.

CRS Insight IN11663, Secure and Trusted Communications Networks Reimbursement Program: Frequently Asked Questions, by Jill C. Gallagher

CRS In Focus IF12798, Salt Typhoon Hacks of Telecommunications Companies and Federal Response Implications, by Chris Jaikaran

CRS In Focus IF11251, National Security Implications of Fifth Generation (5G) Mobile Technologies, by Kelley M. Sayler

CRS Report R47012, U.S. Restrictions on Huawei Technologies: National Security, Foreign Policy, and Economic Interests, by Jill C. Gallagher

CRS Report R46693, *Huawei and U.S. Law*, by Steve P. Mulligan and Chris D. Linebaugh

### **Net Neutrality**

Relevant products are also listed in the "Federal Communications Commission (FCC)" section.

CRS Legal Sidebar LSB11264, No More Deference: Sixth Circuit Relies on Loper Bright to Strike Down Net Neutrality Rules, by Chris D. Linebaugh

CRS Legal Sidebar LSB10693, ACA Connects v. Bonta: Ninth Circuit Upholds California's Net Neutrality Law in Preemption Challenge, by Chris D. Linebaugh

CRS Video WVB00504, Net Neutrality and Its Legal and Policy Issues, by Patricia Moloney Figliola et al.

CRS Report R46973, Net Neutrality Law: An Overview, by Chris D. Linebaugh

CRS Report R40616, *The Federal Net Neutrality Debate: Access to Broadband Networks*, by Patricia Moloney Figliola

#### **Universal Service**

CRS Report R47621, *The Future of the Universal Service Fund and Related Broadband Programs*, by Patricia Moloney Figliola

CRS Legal Sidebar LSB10904, Fifth Circuit Considers Constitutionality of the Universal Service Fund, by Chris D. Linebaugh

CRS Report R46780, Overview of the Universal Service Fund and Selected Federal Broadband Programs, coordinated by Patricia Moloney Figliola

CRS In Focus IF11748, Federal Universal Service Fund and Other Selected Federal Broadband Programs: A Primer, coordinated by Patricia Moloney Figliola

## **Other Topics**

CRS In Focus IF12859, Connecting Constituents with Federal Assistance for Broadband, by Rachael D. Roan

CRS In Focus IF12559, *Legacy Lead-Sheathed Telecommunications Cables: Status and Issues for Congress*, by Jill C. Gallagher et al.

CRS In Focus IF12029, *Decommissioning 3G Networks: Impact on Consumer Devices*, by Jill C. Gallagher

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