

LAW 101

Drawn from Jay M. Feinman, “Law 101”, 2nd edition, 2006 and other sources

Law 101

- Law is not in the law books
 - there is more than one
- Law is not an algorithm
 - even if it reads like flow control statements
 - and could use coverage analysis
 - but sometimes pseudo-code
- Law is not secret
- Law is political conflict
- People make the law

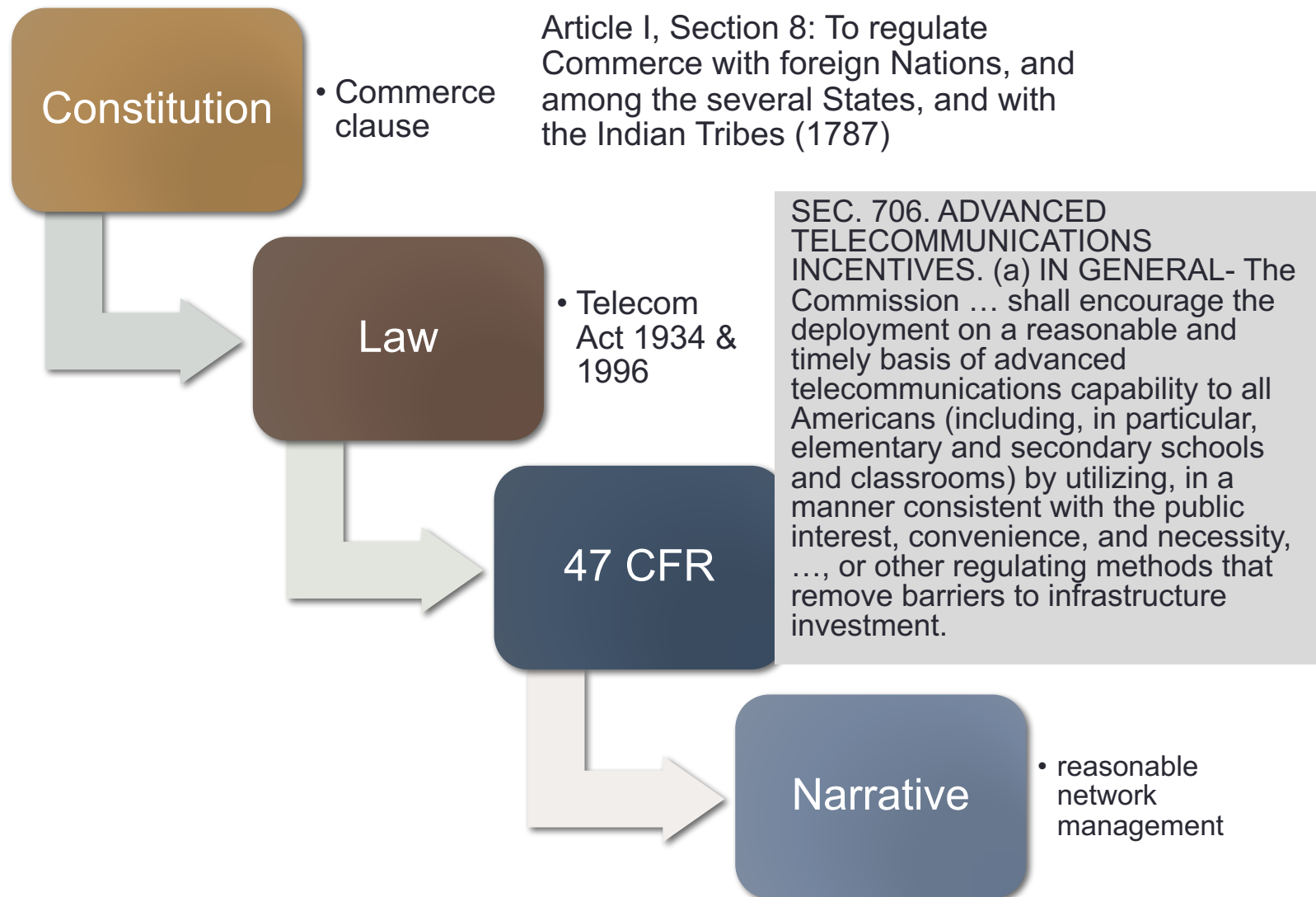
Legal thinking vs. computational thinking

- Laws are generally (intentionally) vague
 - consistency, fairness, predictability
 - “driving faster than the speed limit is a crime”
- Exceptions
 - ambulance
 - rush child to hospital
 - “just a little bit”

The kinds of law

- Constitutional law (1787)
 - relationship between
 - president and Congress
 - federal government and states
 - bill of rights (1791) + 17 amendments
 - short compared to other constitutions
- Criminal law
 - "Homicide means conduct which causes the death of a person or an unborn child with which a female has been pregnant for more than twenty-four weeks under circumstances constituting murder, manslaughter in the first degree, manslaughter in the second degree, criminally negligent homicide, abortion in the first degree or self-abortion in the first degree." (NYS S125.00)
 - "Person," when referring to the victim of a homicide, means a human being who has been born and is alive.
- Civil law
 - contract, uniform commercial code, labor laws, ...
- Administrative law
 - e.g., how can regulations be made and enforced

The US hierarchy of laws



Interstate commerce clause

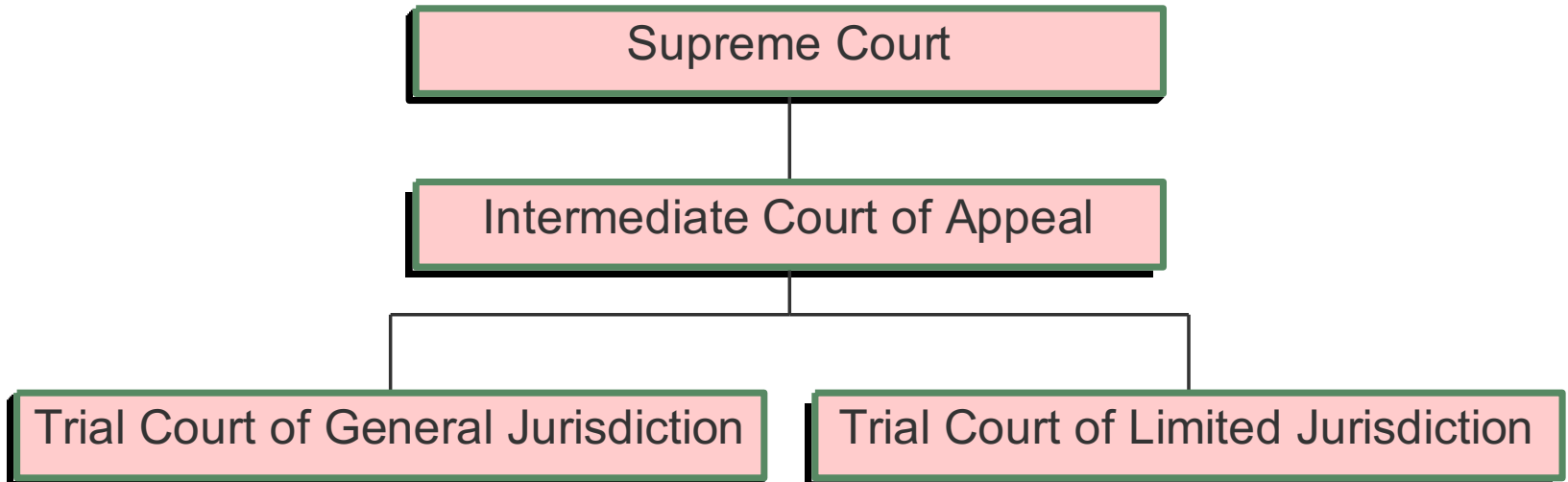
- Originally, prohibit inter-state tariffs and deal with inter-state conflicts
- → federal regulatory power
- limits state power
 - e.g., West Virginia can't make up own emission limits (but: CA)
 - FCC: municipal ISP prohibitions & proposed preemption in NN
- *Gibbons v. Ogden* (1824)
 - 1808: NYS grants Fulton & Livingston monopoly on steam shipping
 - interstate by effect, not just geography (commerce included navigation; state-granted monopoly for shipping)
- *Wickard v. Fillburn* (1942)
 - wheat allotment → effect on commerce
 - “exerts a substantial economic effect on interstate commerce”
 - cumulative, not just individual

Constitution → government

- Federal (U.S., Germany, India) vs. centralized (France)
 - subsidiarity
- Supreme court (and federal courts) review state and federal legislation for constitutionality
- Federal courts: civil, interstate, some criminal
 - bank robbery, drug offenses, violations of federal law
- Constitution as response to Articles of Confederation
 - no power to tax, no national currency, no control of trade
 - → e.g., inter-state tariffs
- Explicitly enumerated powers (10th Amendment)
- Government departments
 - State, War, Treasury, Post Office, Attorney General, federal courts
 - national bank, census, monetary system, patent & copyright
- 3 million civilian employees + 1.5 million military
 - \$2.5 T budget
- States: education, law enforcement, transportation infrastructure

The federal government
& 3/4 of the states have
four basic types of courts:

Basic Court System

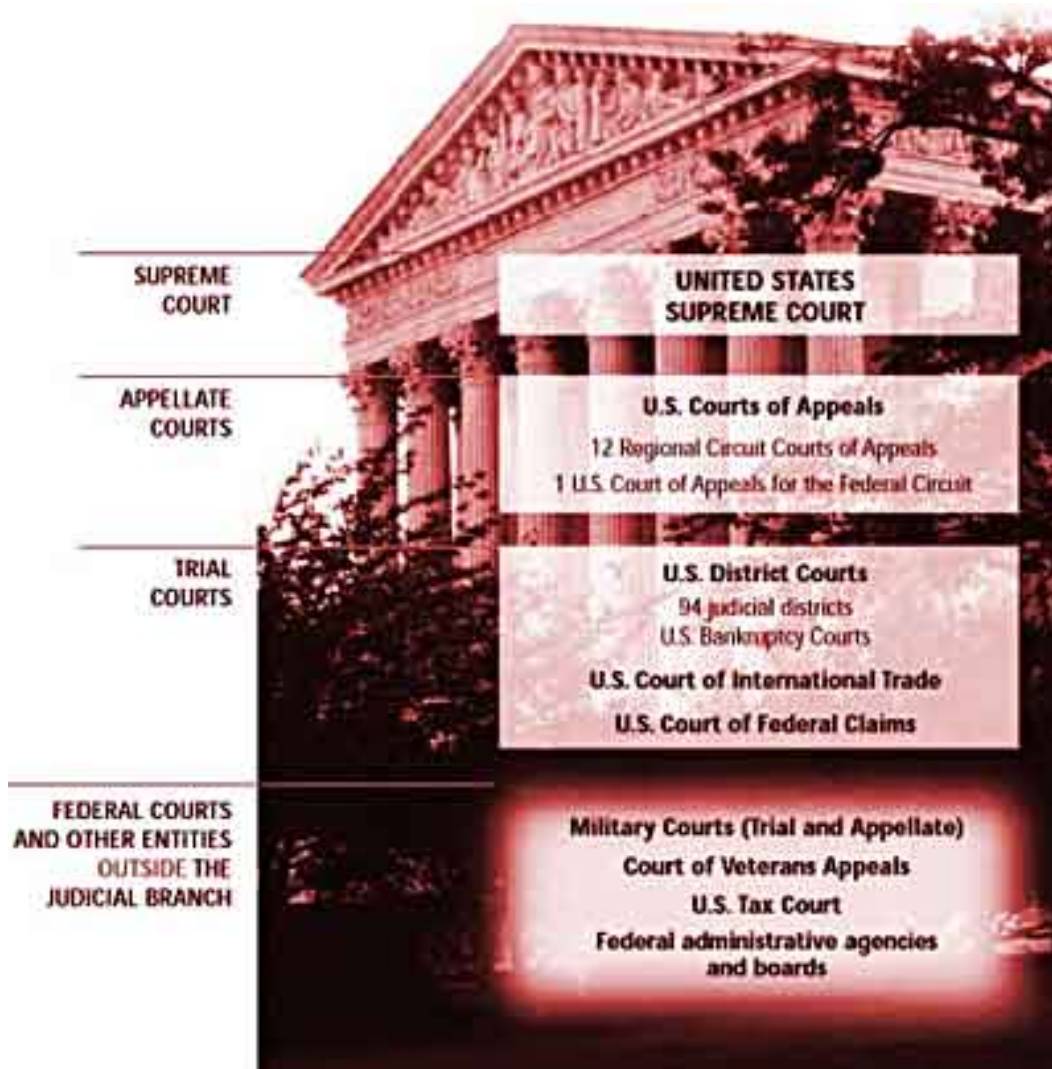


Appellate Courts



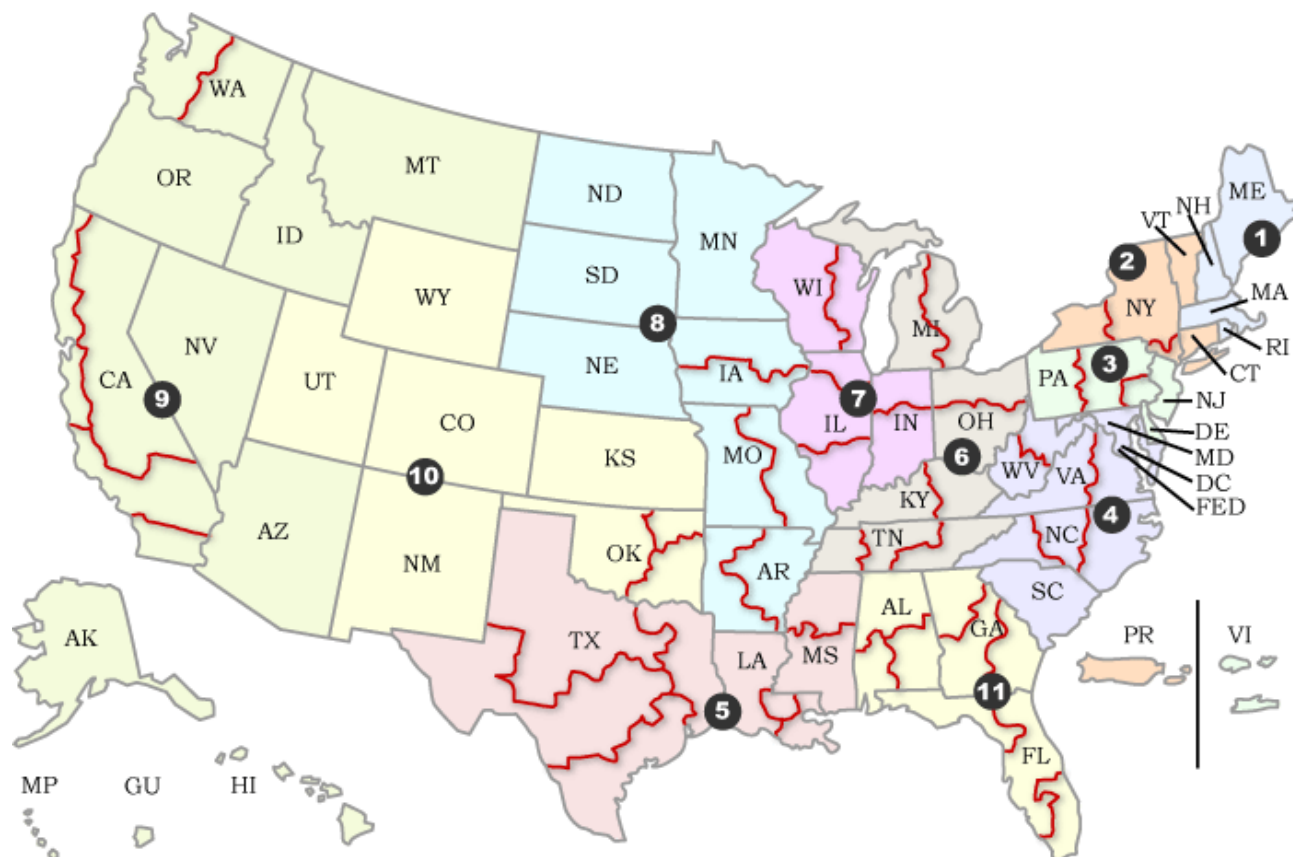
- Everyone is entitled to appeal - persons found guilty in a criminal case and either side in a civil suit.
- Appeals courts determine if the trial judge made an important error in procedure or interpretation of law. If so, the decision of the trial court is reversed and a new trial may be ordered.
- Appellate courts do not hold new trials, they review the record of the trial court and hear arguments from the attorneys.
- Intermediate appellate courts have mandatory jurisdiction while high courts have more discretionary jurisdiction.

United States Federal Court System



DC Circuit for U.S. gov't vs. others
 ("Verizon Communications vs. FCC", "USTelecom v. FCC" 2015)

United States Federal Court System



The 11 multi-state jurisdictions of U.S. Circuit Courts of Appeals are indicated by different-colored regions (the D.C. Circuit is the 12th). Each state within a circuit is also served by a single District Court jurisdiction or, as indicated by the red lines, multiple District Court jurisdictions. Nationwide there are 94 such judicial districts.

First amendment

- “Congress shall make no law ... abridging the freedom of speech, or of the press”
- Goals of Framers unclear:
 - prevent government from direct prohibition of expressing opinions (but punish afterwards)?
 - criticize without sanction?
- World War I cases
 - *Masses Pub. Co. v. Patten* (1917) – cartoons against draft
 - *Schenk v. United States* (1919) – clear & present danger
- “market place of ideas” (Abrams vs. US 1919)
 - vs. dignity of individuals
- political speech vs. commercial speech
 - racial epithets, “fire” in crowded theater, publishing celebrity photos, burning draft cards (non-verbal!), ...?
 - false advertising?
 - regulatory disclosure? (forced speech)

First amendment

- No prior restraint
 - Pentagon papers case
 - except for “must inevitably, directly, immediately” peril (e.g., troop movements in war)
 - exceptions: obscenity, commercial advertising
- Not content-based
 - “because of its message, its ideas, its subject matter, or its content”
 - vs. time, place and manner
 - *compelling interest*, least restrictive, neither too vague nor overly broad
 - see *Texas v. Johnson* (1989) – flag burning
 - heckler’s veto
 - includes hate speech (*R.A.V. v. City of St. Paul* 1992) vs. *Virginia v. Black* (2003) - intimidation

First amendment

- Where?
 - what are public spaces
 - easy: streets & parks
 - malls → federal vs. state law
 - universities? → public vs. private
 - airports (no – Krishna Consciousness vs. Lee; 1992)?
 - state university meeting rooms
 - is my email inbox included?
- What?
 - fully vs. partially vs. unprotected
 - easy:
 - child pornography
 - blackmail & ransom notes
 - fraudulent stock prospectus
 - harder:
 - defamation
 - *New York Times v. Sullivan* (1964)
 - self-censorship – public officials “actual malice” vs. others
 - obscenity (vs. literary value)
 - incitement to illegal activity
 - advertising (pharmacies!)
 - vs. false & deceptive advertising
 - advertising cigarettes, alcohol, gambling

First amendment - obscenity

- Miller v. California (1973)

1. Whether "the average person, applying contemporary community standards", would find that the work, taken as a whole, appeals to the prurient interest,
2. Whether the work depicts or describes, in a patently offensive way, sexual conduct specifically defined by applicable state law,
3. Whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value.

In *United States of America v. Extreme Associates*, a pornography distributor from North Hollywood, California, was judged to be held accountable to the community standards applying in western Pennsylvania, where the Third Circuit made its ruling, because the materials were available via Internet in that area. The United States Court of Appeals for the Ninth Circuit has ruled in *United States v. Kilbride* that a "national community standard" should be used for the internet, but this has yet to be upheld at the national level. [Wikipedia]

Fourth amendment – search & seizure

- “The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.”
- Expectation of privacy
 - garbage (abandoned property)? email?
- Challenges
 - old model: suspicion (how?) → search warrant → search
 - new criminal model: first activity
 - old model: crime → prosecute → punish
 - what about planned crimes? (see *Minority Report...*)

Electronic communication

- Distinguish:
 - What can a *carrier* do with your private information?
 - → CPNI
 - What can your *employer* get access to?
 - What can other *businesses* do with private information?
 - What can *third parties* do?
 - → wire tapping
 - Is listening to Wi-Fi beacons wiretapping? (→ Google case)
 - When and how can the *government* get this information?
 - For criminal vs. civil enforcement?
- Different kinds of information
 - mostly, for commercial privacy
 - health (HIPAA), student records (FERPA), financial data, ...
 - international complications (e.g., European rules, “safe harbor”)

Example: Wire tapping

- At common law, “*eavesdroppers, or such as listen under walls or windows, or the eaves of a house, to hearken after discourse, and thereupon to frame slanderous and mischievous tales, are a common nuisance and presentable at the court-leet; or are indictable at the sessions, and punishable by fine and finding of sureties for [their] good behavior,*” 4 BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND, 169 (1769).

Cyberlaw – Law of the Horse?

- Cyberlaw – law governing X-on-the-Internet
- Frank Easterbrook/Gerhard Casper:
 - “...the best way to learn the law applicable to specialized endeavors is to study general rules. Lots of cases deal with sales of horses; others deal with people kicked by horses; still more deal with the licensing and racing of horses, or with the care veterinarians give to horses, or with prizes at horse shows. Any effort to collect these strands into a course on 'The Law of the Horse' is doomed to be shallow and to miss unifying principles.”
- But extending traditional law to Internet issues problematic
 - see Lessig, “The Law of the Horse – What Cyberlaw Might Teach” (1999)

Internet law issues

- Legal interactions constrained by
 - locality → global reach
 - usually, clear what jurisdiction applies to interaction
 - *sales taxes, pornography, copyright, right-to-be-forgotten, European consumer protection laws, data privacy*
 - scale
 - often, one-on-one interactions
 - *copying mix tapes*
 - physicality
 - includes visibility of actions
 - *determine age of customer, property vs. copyright, first-sale doctrine, sexting*
 - hurdles of distance
 - *access to paper records (pseudo-privacy)*
 - difficulties of law enforcement
 - *robocalling, fraud, ransomware, doxing (cyber-bullying)*

Behavioral constraints

- Law
 - threat of punishment
 - → problems of enforcement & democratic legitimacy
- Social norms
 - dress codes, tax compliance, customs
 - “regulation by raised eyebrow”
 - → problems of scale
- Markets
 - by price, availability
 - → problems of justice
- Architecture
 - physical layout, city architecture (NY Parkways)
 - “code”, protocols
 - → problems of participation and malleability

Two models of Internet

- Internet “space” as unchangeable
 - “state of nature”
 - “Internet interprets censorship as damage and routes around it” (Gilmore, 1993)
 - beyond the ability of nation states to influence
- Internet space as realm of law
 - lots of local interactions: access, commerce, people, ...
 - international law: Law of the Seas (“platform owner”)

COMMUNICATIONS ACT

Telecommunications Act

- 1912: Radio Act → Department of Commerce
 - manage frequencies of first radio broadcasters
 - no power to Commerce to issue licenses or regulate transmissions
- 1927: Radio Act → Federal Radio Commission
- 1934: Communications Act
- 1996: Congress rejects idea that local telephony is a natural monopoly
- New role for FCC: promote and protect competition

Communications Act

47 U.S. Code Chapter 5 - WIRE OR RADIO COMMUNICATION

Current through Pub. L. [113-185](#). (See [Public Laws for the current Congress](#).)

US Code

Notes

[prev](#) | [next](#)

- [SUBCHAPTER I—GENERAL PROVISIONS \(§§ 151–162\)](#)
- [SUBCHAPTER II—COMMON CARRIERS \(§§ 201–276\)](#)
- [SUBCHAPTER III—SPECIAL PROVISIONS RELATING TO RADIO \(§§ 301–399b\)](#)
- [SUBCHAPTER IV—PROCEDURAL AND ADMINISTRATIVE PROVISIONS \(§§ 401–416\)](#)
- [SUBCHAPTER V—PENAL PROVISIONS; FORFEITURES \(§§ 501–510\)](#)
- [SUBCHAPTER V-A—CABLE COMMUNICATIONS \(§§ 521–573\)](#)
- [SUBCHAPTER VI—MISCELLANEOUS PROVISIONS \(§§ 601–621\)](#)

47 U.S. Code § 151 - Purposes of chapter; Federal Communications Commission created

- For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communications, and for the purpose of securing a more effective execution of this policy by centralizing authority heretofore granted by law to several agencies and by granting additional authority with respect to interstate and foreign commerce in wire and radio communication, there is created a commission to be known as the “Federal Communications Commission”, which shall be constituted as hereinafter provided, and which shall execute and enforce the provisions of this chapter.

1996

- Increased competition → reduced regulation
- Continued role for FCC: universal service
- Major objectives:
 - ILECs (particularly RBOCs) must open networks to competitors
 - interconnection
 - wholesale provisioning of services
 - Unbundled Network Elements (UNEs)

How do competitors create their networks?

- build own → cable, CLECs
- build some, rent some from ILEC (e.g., CLEC switch and ILEC loops (UNE-L)
 - components are unbundled network elements
 - needs colocation
- rent all (“UNE-P”)
- resale

Universal service – explicit and implicit subsidies

- Explicit = cash transfers to support service
- Implicit = built into rates by regulation
 - lower residential and rural rates
 - higher long-distance rates
 - higher urban rates through geographic rate averaging between urban and rural areas
 - higher business line rates
 - higher custom calling rates (e.g., call waiting, voice mail)
 - intercarrier compensation (ICC)
- + Carrier of Last Resort (COLR) in local areas

Universal service – recurring issues

- Who receives and for what?
 - must be eligible telecommunications carrier (ETC)
- Who contributes (pays)?
- Relationship of universal service, local competition and access reform
- → transition from voice support to broadband
 - broadband: currently 4 (down)/1 (up) Mb/s
 - proposed: 10/1 Mb/s

Universal service

- Connect America Fund (formally known as High-Cost Support) for rural areas
- Lifeline (for low-income consumers), including initiatives to expand phone service for residents of Tribal lands
- Schools and Libraries (E-rate)
- Rural Health Care

Your phone/Internet bill

Taxes, Governmental Surcharges and Fees

Federal Excise Tax	.21
NJ State Sales Tax	3.75
911 System/Emerg Resp Fee	.90

Total Taxes, Governmental Surcharges and Fees **\$4.86**

911 fee (by county)

Verizon Surcharges and Other Charges & Credits

Federal Universal Service Fee	2.64
VLD Carrier Cost Recovery Charge	1.25
Federal Subscriber Line and Access Recovery Charge	7.03
VLD Long Distance Administrative Charge	.74
Regulatory Recovery Fee – Federal	.08
Video Franchise Fee	.77
CATV Universal Access Fund	.11

Total Verizon Surcharges and Other Charges & Credits **\$12.62**

subsidy (high-cost, low-income, e-Rate)

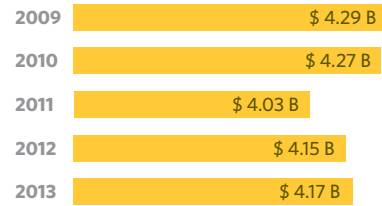
funds the FCC

state video franchise (NJ)

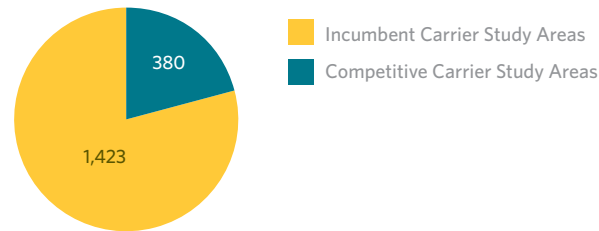
Verizon long distance

USAC

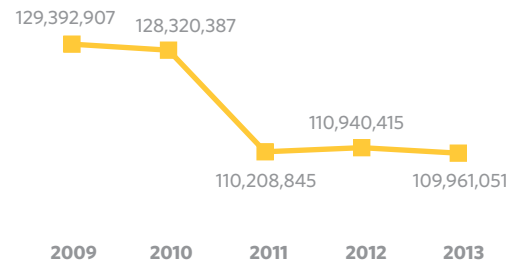
APPROVED DISBURSEMENTS



STUDY AREAS RECEIVING SUPPORT IN 2013



NUMBER OF LINES SUPPORTED



Obama Nov. 2014 statement

To be current, these rules must also build on the lessons of the past. For almost a century, our law has recognized that companies who connect you to the world have special obligations not to exploit the monopoly they enjoy over access in and out of your home or business. That is why a phone call from a customer of one phone company can reliably reach a customer of a different one, and why you will not be penalized solely for calling someone who is using another provider. It is common sense that the same philosophy should guide any service that is based on the transmission of information – whether a phone call, or a packet of data.

So the time has come for the FCC to recognize that broadband service is of the same importance and must carry the same obligations as so many of the other vital services do. To do that, I believe the FCC should reclassify consumer broadband service under Title II of the Telecommunications Act – while at the same time forbearing from rate regulation and other provisions less relevant to broadband services. This is a basic acknowledgment of the services ISPs provide to American homes and businesses, and the straightforward obligations necessary to ensure the network works for everyone – not just one or two companies.

Investment in wired and wireless networks has supported jobs and made America the center of a vibrant ecosystem of digital devices, apps, and platforms that fuel growth and expand opportunity. Importantly, network investment remained strong under the previous net neutrality regime, before it was struck down by the court; in fact, the court agreed that protecting net neutrality helps foster more investment and innovation. If the FCC appropriately forbears from the Title II regulations that are not needed to implement the principles above – principles that most ISPs have followed for years – it will help ensure new rules are consistent with incentives for further investment in the infrastructure of the Internet.

Title II overview

Para	Title	Summary	Relevance
201	Service & charges	“reasonable request”, “just and reasonable”	umbrella
202	Discriminations & preferences	“unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services”	OI?
203	Schedule of charges	tariffs	NECA
204	Hearings on new charges; suspension pending hearing; refunds; duration of hearing; appeal of order concluding hearing	tariff hearings	rare
205	Commission authorized to prescribe just and reasonable charges; penalties for violations	tariff setting	rare

Title II overview

Para	Title	Summary	Relevance
206	Carriers' liability for damages	"shall do, or cause or permit to be done, any act, matter, or thing in this chapter prohibited"	uncommon
207	Recovery of damages	complain OR sue	protects carriers
208	Complaints to Commission; investigations; duration of investigation; appeal of order concluding investigation	"Any person, any body politic, or municipal organization, or State commission, complaining of anything done"	consumer complaints
209	Orders for payment of money	"Commission shall make an order directing the carrier to pay to the complainant"	consumer complaints
210	Franks and passes; free service to governmental agencies in connection with national defense	"giving franks to, or exchanging franks with each other for the use of, their officers"	employee benefits

Title II overview

Para	Title	Summary	Relevance
211	Contracts of carriers; filing with Commission	“Every carrier ... shall file with the Commission copies of all contracts, agreements, or arrangements with other carriers, or with common carriers not subject to the provisions of this chapter, in relation to any traffic affected by the provisions of this chapter to which it may be a party.”	Internet peering?
212	Interlocking directorates; officials dealing in securities	“hold the position of officer or director of more than one carrier”	avoid backdoor mergers
213	Valuation of property of carrier	“make a valuation of all or of any part of the property owned”	rate setting; largely moot
214	Extension of lines or discontinuance of service; certificate of public convenience and necessity	“No carrier shall discontinue, reduce, or impair service to a community”	“certificated carrier”

Title II overview

Para	Title	Summary	Relevance
216	Receivers and trustees; application of chapter	“receivers and operating trustees of carriers”	bankruptcy
217	Agents’ acts and omissions; liability of carrier	“failure of any officer, agent, or other person”	liability
218	Management of business; inquiries by Commission	“full and complete information”	no subpoena needed
219	Reports by carriers; contents and requirements generally	“the cost and value of the carrier’s property, franchises, and equipment; the number of employees and the salaries paid each class”	rare
220	Accounts, records, and memoranda	“including the accounts, records, and memoranda of the movement of traffic, as well as of the receipts and expenditures of moneys”	rate regulation

Title II overview

Para	Title	Summary	Relevance
221	Consolidations and mergers of telephone companies		
222	Privacy of customer information	“has a duty to protect the confidentiality of proprietary information”	CPNI
223	Obscene or harassing telephone calls in the District of Columbia or in interstate or foreign communications		
224	Pole attachments	“shall regulate the rates, terms, and conditions for pole attachments”	competition, Google Fiber
225	Telecommunications services for hearing-impaired and speech-impaired individuals	“the Commission shall ensure that interstate and intrastate telecommunications relay services are available, to the extent possible and in the most efficient manner, to hearing-impaired and speech-impaired individuals”	relay services

Title II overview

Para	Title	Summary	Relevance
226	Telephone operator services		largely moot
227	Restrictions on use of telephone equipment	“unlawful ... cellular telephone service”	robocalling
228	Regulation of carrier offering of pay-per-call services		900 numbers
229	Communications Assistance for Law Enforcement Act compliance		CALEA
230	Protection for private blocking and screening of offensive material	“No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.”	Communications Decency Act
231	Restriction of access by minors to materials commercially distributed by means of World Wide Web that are harmful to minors		COPA; injunction 2009

Title II overview

Para	Title	Summary	Relevance
251	Interconnection	“duty ... to interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers”	traffic exchange
252	Procedures for negotiation, arbitration, and approval of agreements	“Upon receiving a request for interconnection”	negotiation; arbitration
253	Removal of barriers to entry	“No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.”	competition
254	Universal Service	“Access to advanced telecommunications and information services should be provided in all regions of the Nation.”	USF

Title II overview

Para	Title	Summary	Relevance
255	Access by persons with disabilities	“A manufacturer of telecommunications equipment or customer premises equipment shall ensure that the equipment is designed, developed, and fabricated to be accessible to and usable by individuals with disabilities, if readily achievable.”	accessibility
256	Coordination for interconnectivity	“industry standards-setting organizations of public telecommunications network interconnectivity standards”	Part 51
257	Market entry barriers proceeding	“proceeding for the purpose of identifying and eliminating, ..., market entry barriers for entrepreneurs and other small businesses in the provision and ownership of telecommunications services and information services”	competition
258	Illegal changes in subscriber carrier selections	“execute a change in a subscriber’s selection of a provider of telephone exchange service or telephone toll service”	“slamming”

Title II overview

Para	Title	Summary	Relevance
259	Infrastructure sharing	“make available to any qualifying carrier such public switched network infrastructure, technology, information, and telecommunications facilities and functions as may be requested by such qualifying carrier for the purpose of enabling such qualifying carrier to provide telecommunications services, or to provide access to information services”	UNE
260	Provision of telemessaging service	“voice mail and voice storage and retrieval services, any live operator services used to record, transcribe, or relay messages”	cross subsidies
261	Effect on other requirements	“Nothing ... shall be construed to prohibit any State commission from enforcing regulations”	state role

Title II - Special Provisions Concerning Bell Operating Companies

Para	Title	Summary	Relevance
271	Bell operating company entry into interLATA services	“Neither a Bell operating company, nor any affiliate of a Bell operating company, may provide interLATA services”	long distance
272	Separate affiliate; safeguards		cross subsidies
273	Manufacturing by Bell operating companies	A Bell operating company may manufacture and provide telecommunications equipment	CPE
274	Electronic publishing by Bell operating companies	“No Bell operating company or any affiliate may engage in the provision of electronic publishing that is disseminated”	white pages
275	Alarm monitoring services	“No Bell operating company or affiliate thereof shall engage in the provision of alarm monitoring services before the date which is 5 years after February 8, 1996”	
276	Provision of payphone service	“shall not subsidize its payphone service directly or indirectly from its telephone exchange service operations”	pay phone competition!

Title II, Section 201 (47 USC 201)

- §201 (a): “It shall be the duty of every common carrier engaged in interstate or foreign communication by wire or radio to furnish such communication service upon reasonable request therefor;”
 - “to establish physical connections with other carriers”,
- (b) “All charges, practices, classifications, and regulations for and in connection with such communication service, shall be *just and reasonable*, and any such charge, practice, classification, or regulation that is unjust or unreasonable is hereby declared to be unlawful”

47 USC 202

- §202:It shall be unlawful for any common carrier to make any **unjust or unreasonable discrimination** in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage.

Title II Section 208 (Complaints)

- §208 (**Complaints to the Commission**): Any person, any body politic or municipal organization, or State commission, complaining of anything done or omitted to be done by any common carrier subject to this Act, in contravention of the provisions thereof, may apply to said Commission by petition which shall briefly state the facts, whereupon a statement of the complaint thus made shall be forwarded by the Commission to such common carrier, who shall be **called upon to satisfy the complaint** or to answer the same in writing within a reasonable time to be specified by the Commission.

Title II Section 214

- §214: The Commission shall have power to issue such certificate as applied for, to refuse to issue it, or to issue it for a portion or portions of a line, or extension thereof, or **discontinuance, reduction, or impairment of service**, described in the application, or for the partial exercise only of such right or privilege, and may attach to the issuance of the certificate such terms and conditions as in its judgment the public convenience and necessity may require.

Title II Section 222 (Privacy)

- (a) IN GENERAL.--Every telecommunications carrier has a duty to **protect the confidentiality of proprietary information** of, and relating to, other telecommunication carriers, equipment manufacturers, and customers, including telecommunication carriers reselling telecommunications services provided by a telecommunications carrier.
- (b) CONFIDENTIALITY OF CARRIER INFORMATION.--A telecommunications carrier that receives or obtains proprietary information from another carrier for purposes of providing any telecommunications service shall use such information only for such purpose, and shall not use such information for its own marketing efforts.
- PRIVACY REQUIREMENTS FOR TELECOMMUNICATIONS CARRIERS.--Except as required by law or with the approval of the customer, a telecommunications carrier that receives or obtains customer proprietary network information by virtue of its provision of a telecommunications **service shall only use, disclose, or permit access to individually identifiable customer proprietary network information in its provision of (A) the telecommunications service from which such information is derived, or (B) services necessary to, or used in, the provision of such telecommunications service, including the publishing of directories.**

Title II Section 251

- (a) GENERAL DUTY OF TELECOMMUNICATIONS CARRIERS.—Each telecommunications carrier has the duty--
 - (1) to interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers; and
 - (2) not to install network features, functions, or capabilities that do not comply with the guidelines and standards established pursuant to section 255 or 256.

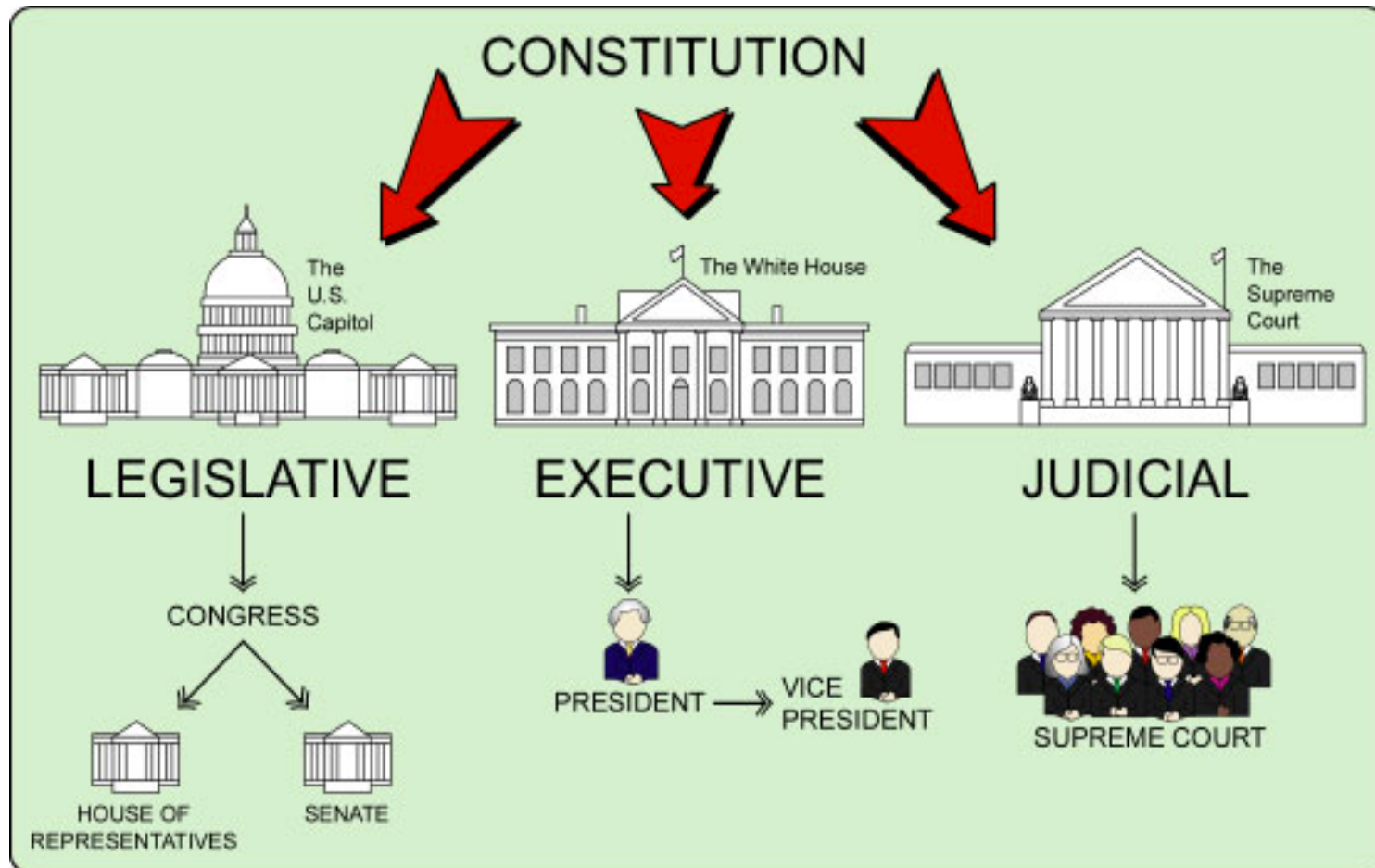
47 USC 332(c)

- **(c) Regulatory treatment of mobile services**
- (1) Common carrier treatment of commercial mobile services
 - (A) A person engaged in the provision of a service that is a commercial mobile service shall, insofar as such person is so engaged, be treated as a common carrier for purposes of this chapter, except for such provisions of subchapter II of this chapter as the Commission may specify by regulation as inapplicable to that service or person. In prescribing or amending any such regulation, the Commission may not specify any provision of section 201, 202, or 208 of this title, and may specify any other provision only if the Commission determines that—
 - (i) enforcement of such provision is not necessary in order to ensure that the charges, practices, classifications, or regulations for or in connection with that service are just and reasonable and are not unjustly or unreasonably discriminatory;
 - (ii) enforcement of such provision is not necessary for the protection of consumers; and
 - (iii) specifying such provision is consistent with the public interest.

47 USC 332 (d)

- (1) the term “commercial mobile service” means any mobile service (as defined in section 153 of this title) that is provided for profit and makes interconnected service available
 - (A) to the public or
 - (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by regulation by the Commission;

Civics was a bit too simple...



Code of Federal Regulations

- Title 3: The President
- Title 7: Agriculture
- Title 33: Navigation and Navigable Waters
- Title 39: Postal Service
- Title 47:
Telecommunications
- Title 49: Transportation
- Title 50: Wildlife and Fisheries



<http://www.ecfr.gov/>

Example of rule – 47 CFR 20.18

- **§ 20.18 911 Service.**
- (a) Scope of section. The following requirements are only applicable to CMRS providers, excluding mobile satellite service (MSS) operators, to the extent that they:
 - (1) Offer real-time, two way switched voice service that is interconnected with the public switched network; and
 - (2) Utilize an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. These requirements are applicable to entities that offer voice service to consumers by purchasing airtime or capacity at wholesale rates from CMRS licensees.
- (b) Basic 911 Service. CMRS providers subject to this section must transmit all wireless 911 calls without respect to their call validation process to a Public Safety Answering Point, or, where no Public Safety Answering Point has been designated, to a designated statewide default answering point or appropriate local emergency authority pursuant to § 64.3001 of this chapter, provided that “all wireless 911 calls” is defined as “any call initiated by a wireless user dialing 911 on a phone using a compliant radio frequency protocol of the serving carrier.”

Authority example

impose the bounce-back requirement on CMRS providers. Indeed, the Supreme Court has long recognized that Title III grants the FCC “expansive powers” and a “comprehensive mandate” to regulate the use of spectrum in the public interest.²³¹ In *Cellco*, one of the most recent decisions of the U.S. Court of Appeals for the D.C. Circuit (D.C. Circuit) regarding the scope of our Title III authority, the court recognized these long-standing principles and explained that Title III confers on the FCC “broad authority to manage spectrum . . . in the public interest.”²³²

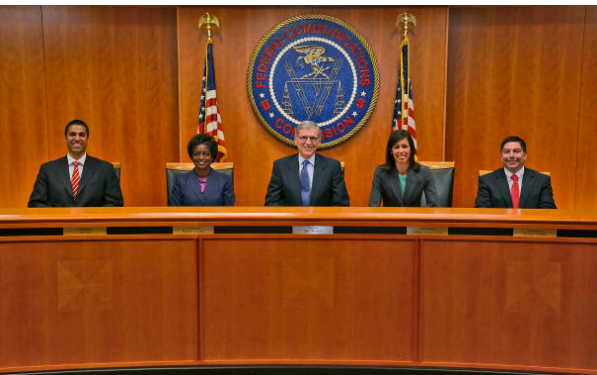
90. We conclude that Sections 301,²³³ 303,²³⁴ 307,²³⁵ 309,²³⁶ and 316,²³⁷ taken together or individually, provide the FCC with authority to apply the bounce-back requirement to CMRS providers. For example, Section 303(b) authorizes the FCC to “[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class.”²³⁸ Addressing the scope of this provision in *Cellco*,²³⁹ the D.C. Circuit recognized that Section 303(b) authorizes the FCC to “lay[] down a rule about ‘the nature of the service to be rendered’ by entities licensed” by the Commission.²⁴⁰ The court further explained that, while a provider may choose not to offer a wireless service, Section 303(b) authorizes the Commission to “define[] the form” that the “service must take for those who seek a license to offer it.”²⁴¹

91. We conclude that Section 303(b) provides the Commission with authority to apply the bounce-back requirement to CMRS providers because the rule prescribes the nature of the service to be

²³¹ *Nat’l Broad. Co. v. United States*, 319 U.S. 190, 219 (1943) (recognizing the FCC’s “expansive powers” and “comprehensive mandate”); see also Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, *Second Report and Order*, 26 FCC Rcd 5411, 5439-5443 (¶¶ 61-64) (2011) (discussing the scope of the FCC’s Title III authority) (“*Data Roaming Order*”), *petition for review denied Cellco Partnership v. FCC*, 700 F.3d 534 (D.C. Cir. 2012) (upholding the FCC’s authority to rely on Title III provisions to impose the data roaming rule).

²³² *Cellco*, 700 F.3d at 541 (quotation marks omitted).

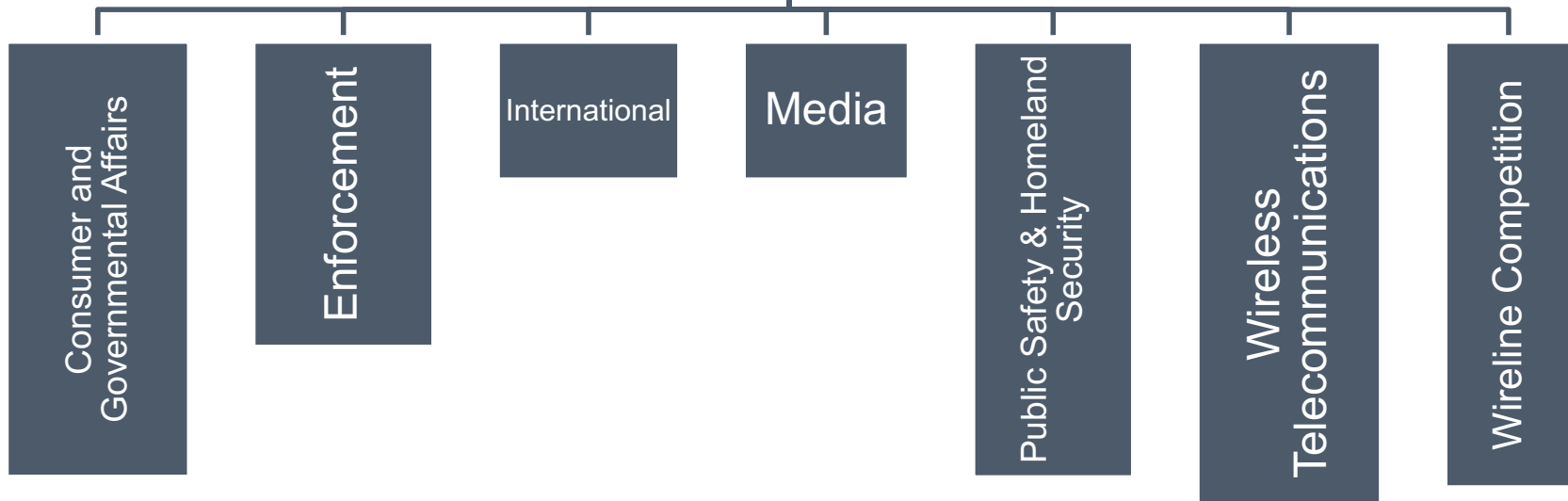
FCC



Chairman (D) –
Tom Wheeler

4
Commissioners
(2 D, 2 R)

President nominates
Senate confirms



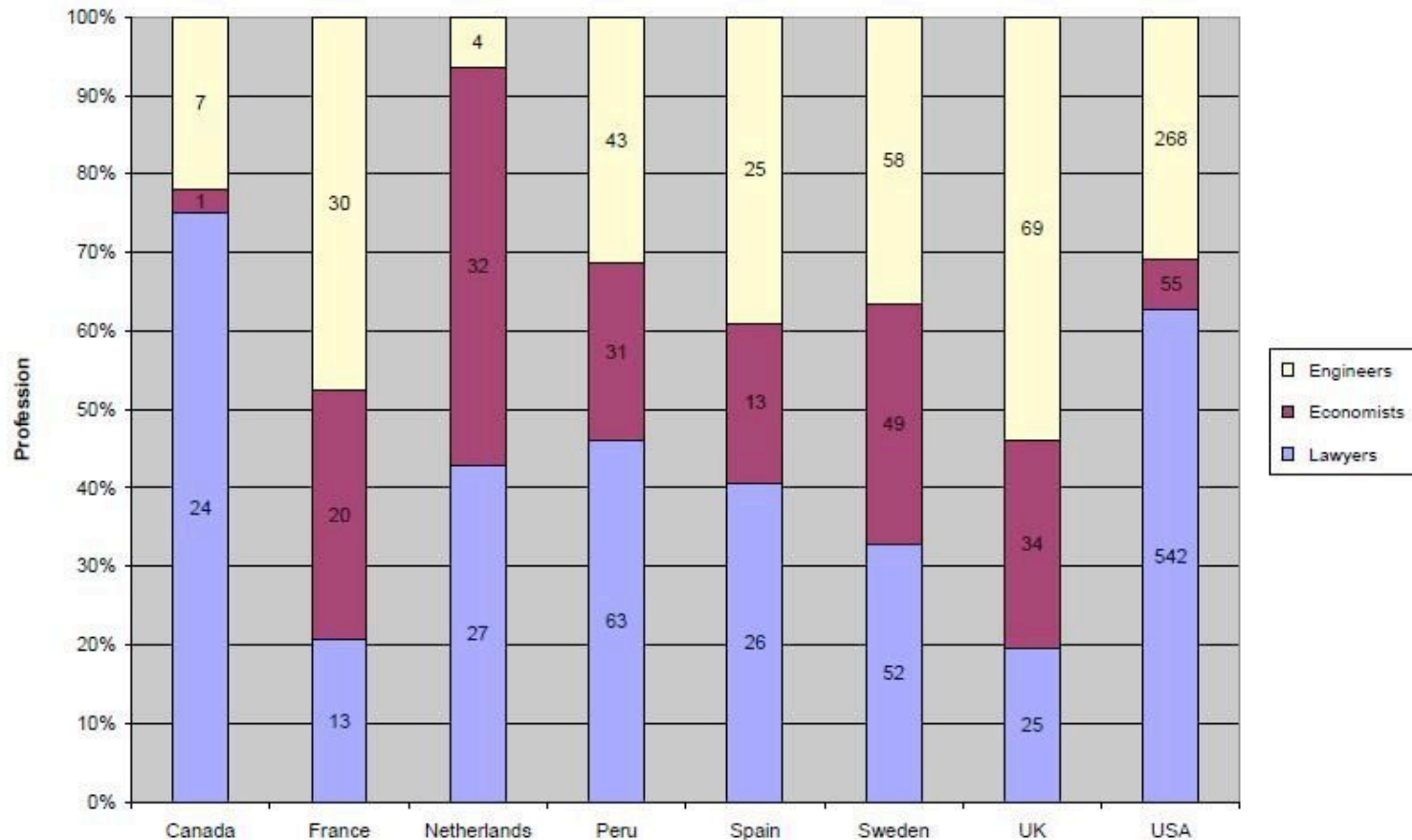
- Independent federal agency
- About 1,700 employees

FCC HQ building



Staffing at National Regulatory Agencies

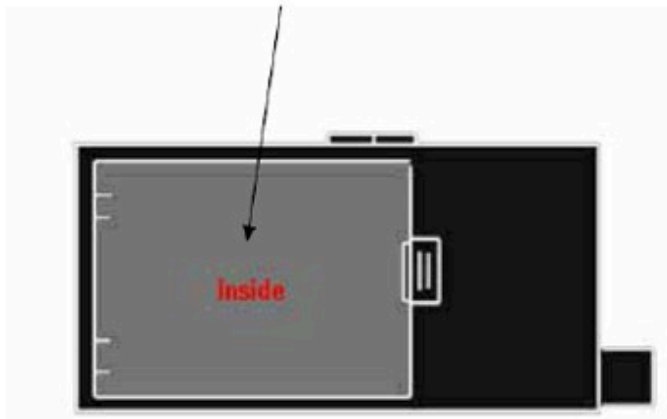
Figure 5. Distribution of professions among professional staff (no "other").



FCC device approval



Note: The FCC ID label shown will be readily visible at the time of purchase.



ADMINISTRATIVE LAW

Joel Kaufman

Sources of FCC authority

- Communications Act of 1934, as amended
 - Title I: Wireline & wireless subject matter jurisdiction
 - ancillary jurisdiction
 - Title II: Common Carrier
 - Title III: Radio Licensing (including wireless)
 - Title V: Enforcement
 - Title VI: Cable
- Other communications statutes

Constraints on FCC authority

- Legal constraints
 - substantive: Constitution, statutes, and FCC rules
 - procedural: Administrative Procedures Act (APA), etc.
- Political constraints
 - Congress can pass new laws, override regulations, limit funding, or ask questions

Procedural requirements

- Important because:
 - much of the Communications Act is written in a general manner that leaves the FCC (and other regulatory agencies) much discretion
 - courts defer to reasonable substantive decisions
- e.g., approve transaction if in public interest, convenience and necessity

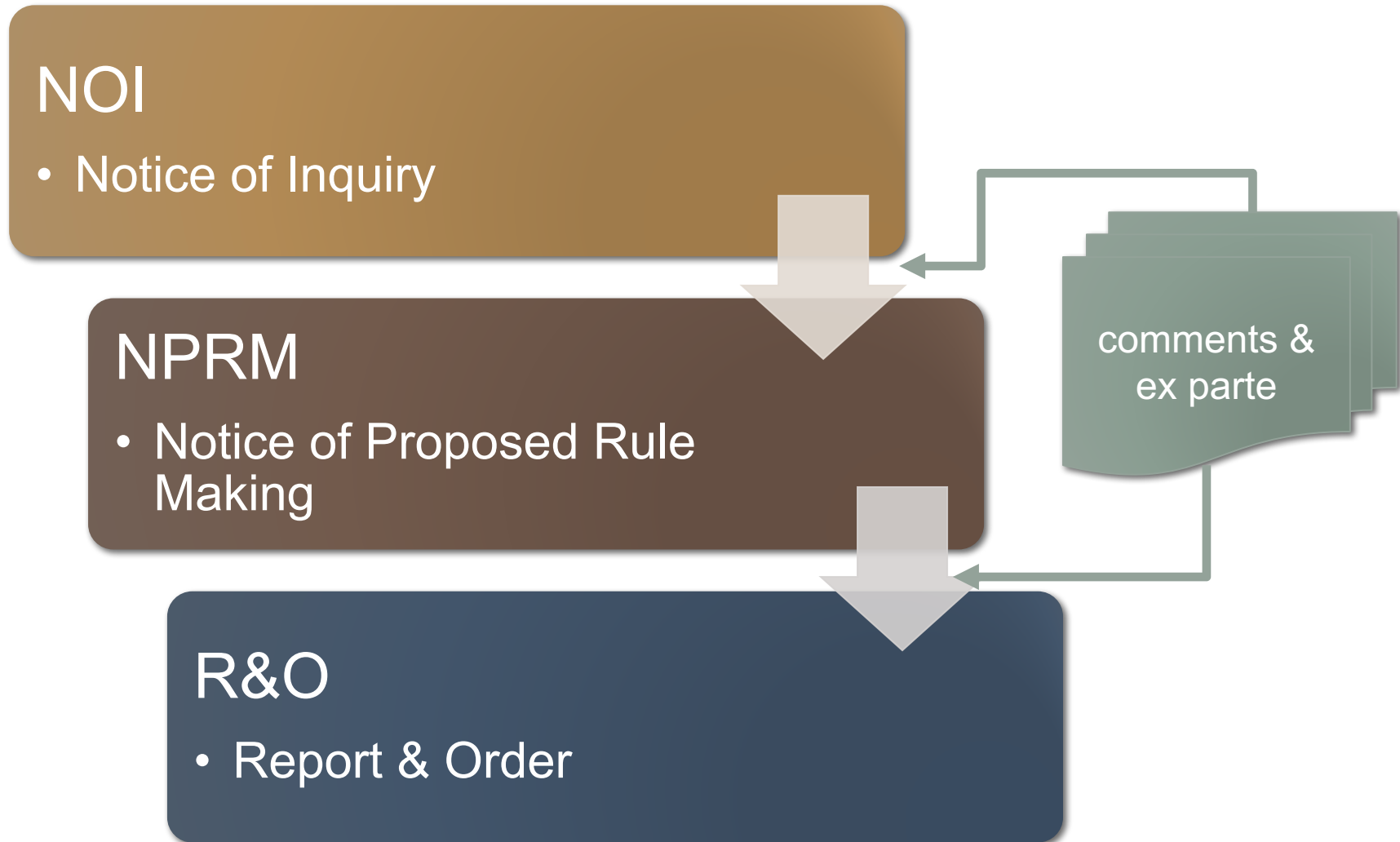
Major purposes of APA

- Providing standardized, minimum procedures to ensure fundamental fairness (e.g., consistency)
- Facilitating public participation and consideration of all views
- Creating record for judicial review

How does a rulemaking get started

- Congress tells regulatory agency to act
 - e.g., Middle Class Tax Relief and Job Creation Act of 2012
 - → incentive auctions
- Regulatory entity acts on its own
- Petition for rulemaking
 - anyone can seek a rules change
 - Bureaus put petition on Public Notice (PN) for public comment

Process



Notice and Comment rulemaking

- Unless an exception applies, Commission must use notice and comment procedures to adopt rule
- Commission adopts Notice of Proposed Rulemaking (NPRM) either at monthly Open Meeting or on circulation
 - Bureaus and offices generally lack delegated rulemaking authority
- NPRM must include statement of legal authority
 - terms or substance of the proposed rule, or a description of the subjects and issues involved
- NPRM must be sufficient to expose the proposal to public comment, and give affected parties an opportunity to develop evidence for their position
- May issue more general Notice of Inquiry (NOI) if not ready to go to NPRM



NEWS

Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action.
See MCI v. FCC, 515 F.2d 385 (D.C. Cir. 1974).

FOR IMMEDIATE RELEASE:
September 9, 2014

NEWS MEDIA CONTACT:
Kim Hart, 202-418-8191
E-mail: Kim.Hart@fcc.gov

FCC ANNOUNCES TENTATIVE AGENDA FOR SEPTEMBER OPEN MEETING

Washington, D.C. – Federal Communications Commission Chairman Tom Wheeler announced that the following items will tentatively be on the agenda for the next open meeting scheduled for Tuesday, September 30, 2014:

Sports Blackout Rules: The Commission will consider a Report and Order that would eliminate the Commission's sports blackout rules, which can prevent consumers from watching their teams' games on local television.

Comprehensive Review of Licensing and Operating Rules for Satellite Services: The Commission will consider a Further Notice of Proposed Rulemaking to streamline and update Part 25 of the Commission's rules, which governs licensing and operation of space stations and earth stations for the provision of satellite communication services. These proposals will amend, clarify or eliminate numerous rule provisions and reduce regulatory burdens.

Part 15 NPRM: The Commission will consider a Notice of Proposed Rulemaking to revise rules for unlicensed operations in the TV bands and new 600 MHz Band, including fixed and personal/portable white space devices and unlicensed microphones. The proposed changes and new rules are intended to allow more robust and spectrally efficient unlicensed operations without increasing the risk of harmful interference to other users.

Wireless Microphones NPRM: The Commission will consider a Notice of Proposed Rulemaking to address the needs of wireless microphone users, while recognizing that they must share spectrum with other wireless uses in an increasingly crowded spectral environment.

The Open Meeting is scheduled to commence at 10:30 a.m. in Room TW-C305, at 445 12th Street, S.W., Washington, D.C.

The event will be shown live at FCC.gov/live.

NPRM

- must comply with Regulatory Flexibility Act (RFA) and Paperwork Reduction Act (PRA)
- must peer review science and social science
- should ask about costs and benefits per EO 13563
- must publish summary of NPRM and all other rulemaking orders in the Federal Register

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- > How do I find a rule?
- > How do I submit a comment?
- > How do I find my comment?
- > Do my comments make a difference?

SEARCH for: Rules, Comments, Adjudications or Supporting Documents:

Search

» Advanced Search

New Commenting API

DOS Regulations Twitter Page

Site Enhancements

Developers

See how developers are using Regulations.gov APIs!

Unified Agenda Spring 2014

A Commenter's Checklist

What's Trending

- Clean Water Act; Definitions: Waters of the United States
Closing on Nov 14, 2014
- Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units
Closing on Dec 01, 2014
- Improve Tracking of Workplace Injuries and Illnesses
Closing on Oct 14, 2014
- Endangered and Threatened Wildlife and Plants: Designation of Critical Habitat for the Western Distinct Population...
- Agency Information Collection Activities; Comment Request; 2015-2016 Federal Student Aid Application
Closing on Oct 27, 2014

Comments Due Soon

- Today (77)
- Next 3 Days (119)
- Next 7 Days (253)
- Next 15 Days (466)
- Next 30 Days (773)
- Next 90 Days (1,146)

Newly Posted

- Today (75)
- Last 3 Days (75)
- Last 7 Days (324)
- Last 15 Days (1,018)
- Last 30 Days (2,163)
- Last 90 Days (6,227)

Federal Register

0 Sign in Sign up



FEDERAL REGISTER

The Daily Journal of the United States Government

Tuesday, October 14th



Current Issue

78 Notices 4 Proposed Rules 13 Rules 5 Significant Documents 196 Pages

Browse this & other dates



MONEY



ENVIRONMENT



WORLD



SCIENCE & TECHNOLOGY



BUSINESS & INDUSTRY



HEALTH & PUBLIC WELFARE

Pine Shoot Beetle; Addition of Quarantined Areas and Regulated Articles

A Rule by Animal and Plant Health Inspection Service on 10/10/2014



Fyn Kynd

We are adopting as a final rule, without change, an interim rule that amended the pine shoot beetle regulations by adding areas in the States of Illinois, Maryland, Missouri, New York, and

Virginia and the States of Indiana and New Jersey in their entirety to the list of quarantined areas.

34 NEW DOCUMENTS IN THIS ISSUE

121 COMMENT PERIODS ENDING SOON

RECENT BLOG POSTS

CFR Color Selection for 2015!

Posted by Aaron Woo on September 3, 2014

[This post was written by Ann Worley and Kristen Goshorn of OFR's CFR Unit] Each year, there is one update every book in the Code of Federal Regulations (CFR) receives...

[Continue reading →](#)

New "Submit a Formal Comment" Feature!

Posted by Aaron Woo on July 31, 2014

Federal Register Modernization Act Passed House of Representatives

Notice and Comment

- FCC rules provide for comment & reply comments
- Must allow reasonable time for comment
- Ex parte communications allowed until start of sunshine period
 - one week before agenda meeting
- Permit-but-disclose proceedings
 - copy of written or summary of oral ex parte communications must be filed in the record



March 14, 2014

Via Electronic Delivery

EX PARTE NOTICE

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: *Petition to Launch a Proceeding Concerning the TDM-to-IP Transition*, GN Docket No. 12-353; *Technology Transitions Policy Task Force*, GN Docket No. 13-5; *Numbering Policies for Modern Communications*, WC Docket No. 13-97; *Numbering Resource Optimization*, CC Docket No. 99-200

Dear Ms. Dortch:

On March 12, 2014, Mark F. Bregman, Senior Vice President and Chief Technology Officer, Neustar, Inc. ("Neustar"), Tom McGarry, Neustar Fellow, and the undersigned met with Henning Schulzrinne, Chief Technologist of the Federal Communications Commission, and Robert Cannon, Senior Attorney, Office of Strategic Planning & Policy Analysis, to discuss issues in the above-referenced proceedings.

Freedom of Information Act (FOIA)

- No state secrets act in United States
- Agency records are publicly available unless specific exemptions apply
 - national defense
 - law enforcement
 - personal privacy
 - *pre-decisional agency deliberations*
 - trade secrets
 - commercial and financial information → protective orders
 - e.g., merger review

PUBLIC POLICY CHALLENGES 2020

Policy models

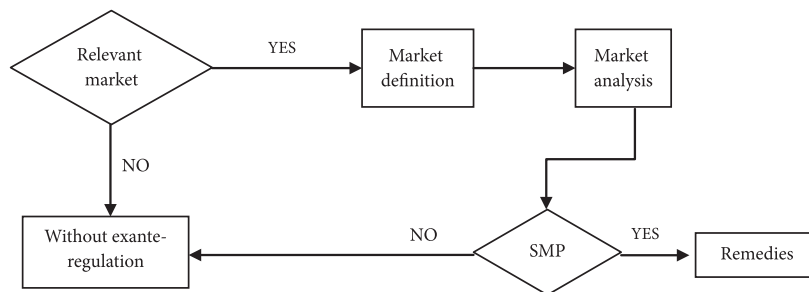


Regulated price	Benchmark	Procedural safeguards	Case-by-case	Antitrust
Regulator determines pricing level, model, or methodology	Regulator establishes safe harbor based on external data	Regulator establishes external process for redress	Regulator establishes qualitative criteria for adjudicating disputes	Regulator defers to courts or enforcement agencies
Rate of return; price caps; TELRIC	Program access (rates outside integrated footprint); railroads (rates from competitive routes); transfer pricing valuation for IRS	Commercial arbitration remedy (MVPD access to Fox's Regional Sports Networks in NewsCorp-DirectTV merger); rules vs. blocking (ATT-SBC, VZ-MCI conditions)	Data roaming ("commercially reasonable" criteria)	AT&T breakup
Drawbacks well understood	Benchmark selection critical	Can protect vs. anti-competitive foreclosure, if not monopoly pricing	Criteria subject to interpretation; costly and slow remedy	Trinko precedent (2003) can deprive complainant of judicial remedy

Regulatory models

“European”

- Worry about under-enforcement
 - e.g., irreversible concentration
- Market baskets



“US”

- Worry about over-enforcement
- Regulated segments + forbearance
 - Title I: information services
 - Title II: telecommunication
 - Title III: mobile
 - Title VI: cable TV

Table 1. List of relevant markets according to the directives from 2003

Type of service	No.	Relevant market
RETAIL		
Public fixed telephone network at fixed location	1.	Access to the public telephone network at a fixed location – residential customers
	2.	Access to the public telephone network at a fixed location - non-residential customers
	3.	Publicly available local and/or national telephone services provided at a fixed location – residential customers
	4.	Publicly available international telephone services provided at a fixed location – residential customers
	5.	Publicly available local and/or national telephone services – non-residential customers
	6.	Publicly available international telephone services – non-residential customers
Lines leased to end-users	7.	Minimum set of leased lines
WHOLESALE		
Interconnection between operators in fixed networks	8.	Call origination on the public fixed network at a fixed location
	9.	Call termination on individual public telephone networks provided at a fixed location
	10.	Transit services in the fixed public telephone network
Access to the public fixed telephone network	11.	Wholesale unbundled access (including shared access) to metallic loops and sub-loop for the purpose of providing broadband and voice services
	12.	Wholesale broadband access
Lines leased to other operators	13.	Wholesale terminating segments of leased lines
	14.	Wholesale trunk segments of leased lines
Voice service in the public mobile telephone networks	15.	Access and call origination on public mobile telephone networks
	16.	Voice call termination on individual mobile networks
	17.	Wholesale national market for international roaming on public mobile networks
Broadcasting	18.	Broadcasting transmission services to deliver broadcast content to end-users

EU market definition 2014

Market 1	Wholesale call termination on individual public telephone networks provided at a fixed location
Market 2	Wholesale voice call termination on individual mobile networks
Market 3	a) Wholesale local access provided at a fixed location b) Wholesale central access provided at a fixed location for mass-market products
Market 4	Wholesale high-quality access provided at a fixed location

Societal “Goods” – Whose Responsibility?

What Users, Governments Want

- Competition whenever possible
- Network access for all
- Choice of what to do over network
- Control over use of own data
- Emergency communications
- Protection vs. malware
- Clarity around data jurisdiction
- Lawful intercept

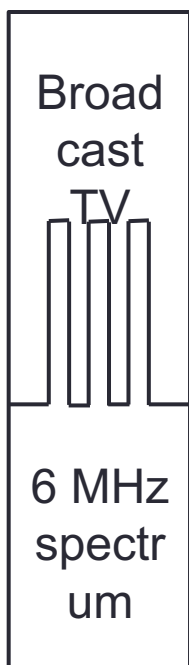
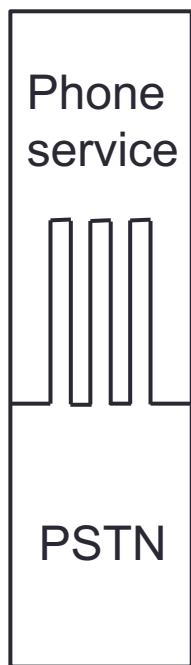
Regulatory Challenges (U.S.)

- Precedents work against competitive/tech neutrality
- Statutory goals outdated or inconsistent with grant of authority
- App providers outside US
- Coordination with complex industry
- Public sector funding realities

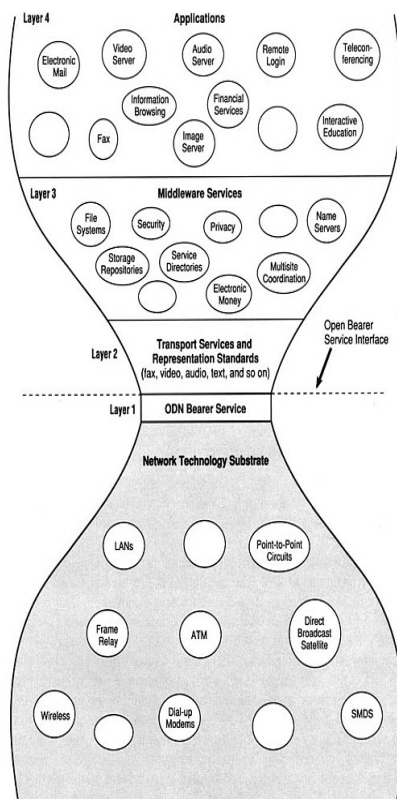
Did the Internet change industry structure?



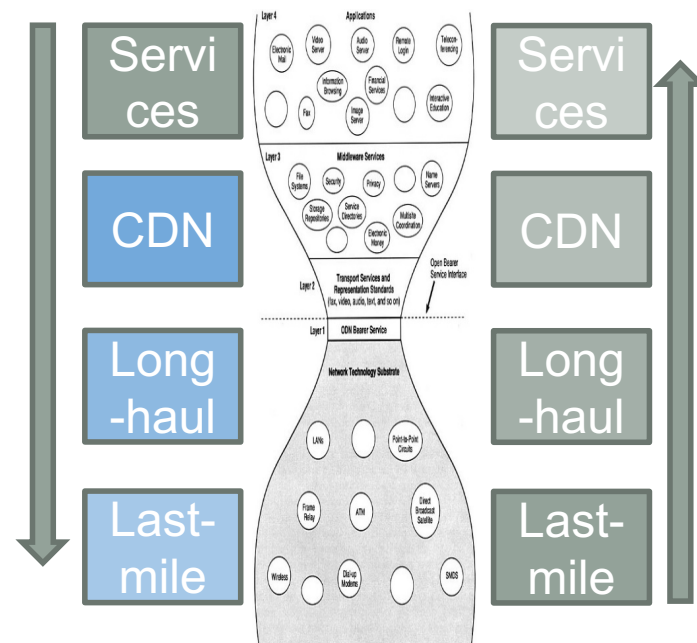
1934



1994*



2014

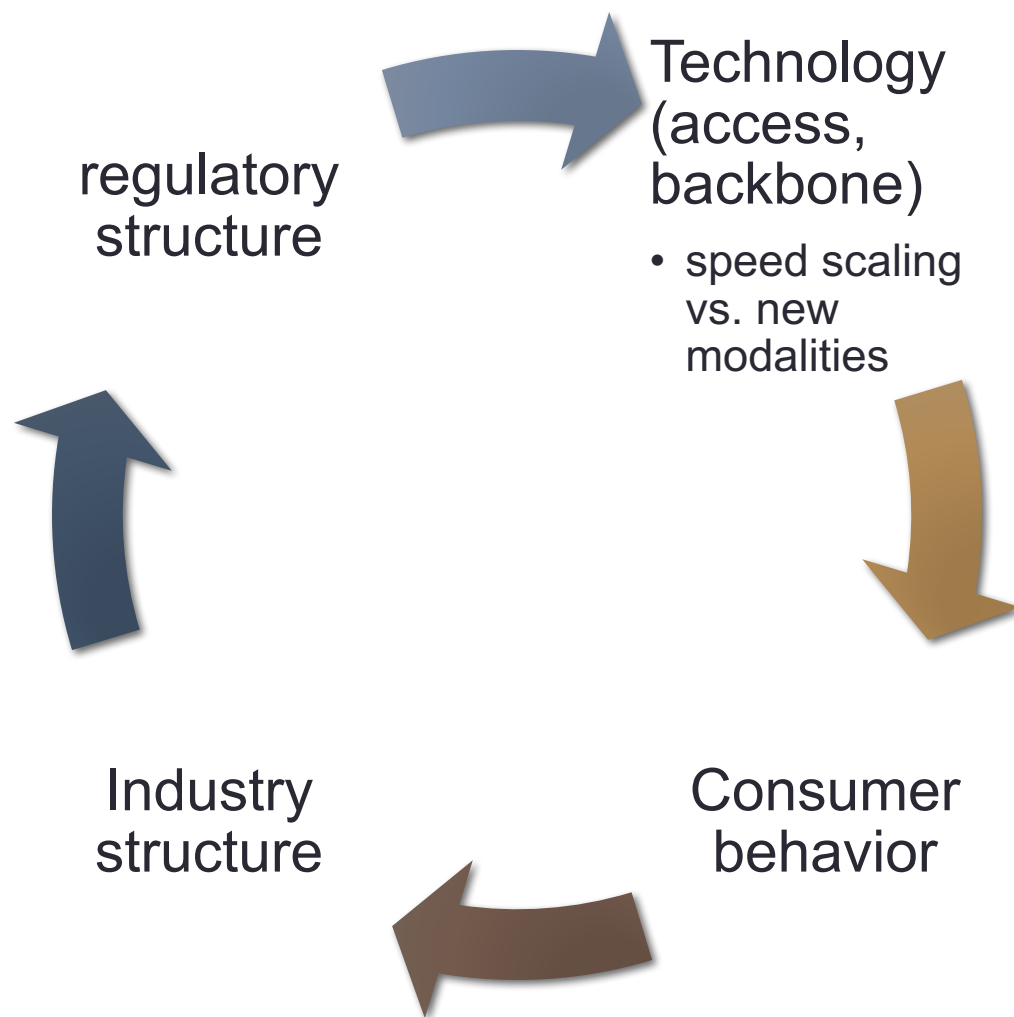


*Realizing the Information Future: The Internet and Beyond. Computer Science and Telecommunications Board, National Research Council, 1994, p. 53

Predicting

- Policy mainly concerned about mass deployment (and legacy), not science experiments
 - IPv6 was standardized in 1996, with earlier efforts starting in 1992, but did not achieve even modestly wide deployment until 2010
 - first smartphone shown in 1994, 13 years before the iPhone launch
- Technology in wide use in 2020 likely in lab & standardization in 2014

The dependency cycle



Technology environment

- By 2020, the classical notion of Moore's law of increasing transistor counts, particularly for the same power budget, will have largely run its course and mobile devices will remain constrained by battery technology.
- Higher access speeds will largely depend on dense availability of fiber infrastructure, possibly leveraging infrastructure provided by non-traditional providers.
 - Doubling spectrum → one year of bandwidth growth
 - Wi-Fi overlay

Access networks

- Residential access networks:
 - roughly 1 Gbps FTTH networks,
 - 20-100 Mbps HFC networks
 - 10-20 Mbps suburban DSL and LTE 4G/5G networks
 - 1-6 Mbps rural DSL
 - 5-20 Mbps satellite.
- The uneven availability of the higher broadband speeds in suburban fringe or low-income areas too economically unattractive to sustain competitors is likely to become more pronounced, particular where neither communities nor rural electric cooperatives are likely or possible entrants.
- For policy purposes, it suffices to consider widespread availability and adoption rather than offers priced out of reach of most consumers or only available to a tiny fraction of households.

Industry structure

- ADSL increasingly non-competitive
- Non-wireless carriers face stark choices:
 - become AOL for not-quite-broadband
 - where cable is not available
 - and cheaper than LTE
 - invest heavily into fiber and compete with HFC
 - subsist on USF support
 - become a datacenter & business services company

Next-generation Internet

- Unlikely to see alternative models (beyond IPv6) by 2020
- All alternatives struggle with the “why bother?” problem
 - 10x cheaper? 10x better?
 - example: content-based networks
- History of application & transport-layer solutions to network-layer problems
 - security
 - multicast
 - mobility?
 - caching → CDN

Financial constraints

- Constraining constant are consumer financial resources:
 - As fixed and mobile communication expenses are now the largest “utility” expense for many households and as the income of at least 90% of households is unlikely to increase much in real terms by 2020, the ability to free up additional financial resources for Internet and mobile by dropping landlines is also likely to diminish.
 - The average US electric utility bill is \$107.28 (2012).

Technology-induced policy challenges

- Universal service obligations & COLR → other service obligations
 - With emergency (text or voice) apps, the notion that the voice provider needs to be involved in the provision of 911 service will not be as clear-cut.
 - Should consumers be able to choose a 911 access provider separate from their voice provider?
 - Is the model of a monthly per-device or per-line fee for 911 sustainable and fair?

Regulatory models

- So far, Internet regulation had advantage of largely leveraging existing last 1/4-mile infrastructure
- Models:
 - degrees of structural separation
 - unbundling, explicit split, ...
 - rely on multiple parallel infrastructures
 - emergence of next technology
 - competitive on speed & cost/GB
 - low-end competition easier

Regulatory models

- Title determination high-stakes battles and may be both over-inclusive and under-inclusive.
- Dividing firms in the communication landscape into carriers and everyone else increasingly difficult
- Temptation to fly *carrier flags of convenience*, asserting that status only where it accrues benefits.
- Trigger approach for individual rights and obligations can be more adaptive.
 - access to rights-of-way may trigger build-out, sharing or outage notification obligations
 - but can be separated from (say) consumer recourse, privacy, numbering or interconnection concerns. In some cases, obligations could then also be conditioned on significant market power or vertical integration thresholds, essentially combining aspects of the classical European and US approaches.

Cybersecurity

- Traditionally, breaches mostly affected the careless or unlucky victim
- but lack of diligence (and BCP 38 compliance) may cause entities to impose **externalities** on other parts of the Internet community by facilitating distributed denial-of-service attacks or route hijacking.
 - software vendors, BCP 38, credit cards
- Cyber insurance: fire insurance → city fire codes