Evaluating "Net Neutrality" Regulation

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## What's this all about?

- Internet transports data packets on a "best efforts" basis with no prioritization by the "last mile" Internet Service Provider
- Based on identity of sender, recipient, or contents, a network owner could:
  - Block, speed, or slow particular packets
  - Offer differential pricing for different packets based on sender or receiver's willingness to pay
  - Cut off users whose usage patterns indicate they are downloading material the network owner would like to treat differently

## Definitions of "net neutrality"

- Consumers are entitled to access lawful Internet content of their choice, run applications and services of their choice, and connect legal devices that do not harm the network. (FCC Broadband Policy Statement, 2005)
- Internet service provider cannot "provide or sell to Internet content, application or service providers ... any service that privileges, degrades, or prioritizes any packet transmitted" over the provider's facilities "based on its source, ownership, or destination." (AT&T/Bellsouth merger condition, 2006)
- Consumers have the right to use any device or application of their choice, as long as it does not harm the network. (FCC Upper 700 MHz C Block auction rules)

What can an analytical framework do?

 Regulatory analysis identifies cause and effect

Regulatory analysis cannot automate the decision

KEY STEPS IN REGULATORY ANALYSIS

- 7. Identify the desired outcomes
- $\mathcal{2}$ . Assess evidence of market failure
- $\mathcal{S}$ . Identify the uniquely federal role
- 4. Assess effectiveness of alternative approaches
- 5. Identify costs
- 6. Compare costs with outcomes

## Regulatory Analysis in Plain English

- Figure out what you're trying to do and how you'll know you did it
- 2. Figure out why government needs to do it
- 3. Figure out what level of government needs to do it
- 4. Think about different ways to do it and find the most effective one
- 5. Figure out what you have to give up to do whatever you're trying to do
- 6. Weigh the pros and cons

## Who's required to do this?

- Executive agencies required to perform analysis of economically significant regulations under E.O.s 12866 and 13422, Regulatory Planning and Review
- FCC and FTC both have jurisdiction over broadband
- OMB does not require independent agencies to comply with the executive orders on regulatory review

## What have regulators done thus far?

- EVALUATE: FCC declares broadband is an information service
- Sept. 2005: FCC Broadband Policy Statement
- June 2006: FTC claims jurisdiction in Comm. Kovacic's Senate testimony
- Dec. 2006: FCC net neutrality conditions on AT&T/BellSouth merger
- Feb. 2007: FTC workshop
- March 2007: FCC Notice of Inquiry
- June 2007: FTC Staff Report
- July 2007: Reply Comment period closes at FCC
- July 2007: FCC neutrality conditions in C Block spectrum auction

## 1. Outcomes

- Benefit to the public produced, or harm avoided, as a result of government action
- Activities, outputs, expenditures, laws, programs, and regulations are not outcomes
- Verify causality and measure regulation's effect on outcomes

Outcomes suggested in inquiries

- Consumer welfare
- "Democracy" (First Amendment)
- International competitiveness
- Universal broadband access
- Privacy

## Values $\rightarrow$ outcomes $\rightarrow$ measures

Value	Outcome	Causality	Measures
Consumer welfare	Every resource is employed in the use that consumers value most highly, and no consumer can be made better off without making another consumer worse off	Competitive markets do this Regulation does this when it sets prices and quality at efficient levels	How competitive is the broadband market? Are regulated prices/ quality at efficient levels?
First Amendment/ Participation in political discourse	Whoever pays can say whatever they want?	When would competition fail to safeguard this, and how would regulation do so?	?
	Maximum possible number of people online?	How will regulation expand # of users?	Change in subscribership caused by regulation
	Other?	?	?

## What the commissions did

#### FTC Staff Report

- Focused on consumer welfare
- Assessed state of competition
- Identified factors for assessing whether regulation will improve consumer welfare

#### FCC

- Asked if it can enforce rules "in the presence of market failures or other specific problems"
- If rules are not necessary now, "what market characteristics would justify adoption of rules?"

## 2. Market failure

- Occurs when voluntary action fails to accomplish as much of the outcome as consumers would want and be willing to pay for
- Market power: Firm reduces output (or quality) even though value to consumers exceeds the additional cost of producing it
- Key question: Are violations of "net neutrality" an exercise of market power, or do they confer some benefit on consumers?
- Many values/outcomes are unrelated to market failure
- Still need theory/evidence showing why a competitive market does not produce the desired level of these outcomes

Competition analysis

- Define relevant market based on consumer behavior
- Determine whether there is significant market power
- Determine whether profit incentives for avoiding discriminatory behavior outweigh profit incentives for discriminatory behavior
- Determine whether discriminatory behavior creates offsetting benefits for consumers

## Assessing market power

- Price and performance competition
- Market power and concentration
- Contestability
- Dynamic competition
  - Entry
  - Rivalry
- Barriers to entry (spectrum, cable, BPL rules)
- Terminating access monopoly
- 2-sided markets

## FTC Staff Report on market failure

- "[T]here is little evidence to date of consumer harm from anticompetitive practices by ISPs or any other network operators; the allegations of anticompetitive conduct focus mainly on effects that may occur if certain actions, such as exclusive agreements or vertical integration, are undertaken in the future."
- "With respect to discrimination, broadband providers have conflicting incentives related to blockage of and discrimination against data from non-affiliated providers of content and applications."
- "It appears that, thus far, little attention has been paid in the net neutrality debate to the question how possible harms and benefits from such discrimination might be assessed in the broadband Internet access context."
- "We recommend that policy makers proceed with caution in evaluating proposals to enact regulation in the area of broadband Internet access."

# FCC filings

- 10,000 comments; only 66 > 2 pages
- 20 advocate regulation
- No empirical evidence of business practices showing a market failure currently exists
- Many argued network owners have "ability and incentive" to discriminate in the future – it *could* happen
- No evidence demonstrating how likely market failure is in the future

## 3. Identify the core federal role

- What is the federal government's "comparative advantage" vs. other levels of government?
- Need to consider knowledge and incentives
- Largely determined by interstate/international nature of the Internet
- Assess FCC vs. FTC comparative advantages

### 4. Assess effectiveness of alternatives

- FCC Policy Statement as is or amended
- Prohibit/mandate specific practices
- Performance-based regulation
- Antitrust/consumer protection enforcement
- Mandated information disclosure
- Currently existing competition
- Enhanced competition via removal of entry barriers

Alternatives FCC seems to be considering

- Status quo Policy Statement as a threat of regulation
- Add a new non-binding non-discrimination principle to the Policy Statement
- Adopt the Policy Statement as a set of rules
- Adopt the Policy Statement as a set of rules with some additions or deletions

## 5. Costs

- Federal expenditures
- Non-federal expenditures
- Price effects
  - Pass-through of costs increases prices
  - Price regulation alters price structure
  - "Deadweight loss" from both
- Quality effects
- Behavioral changes

Deadweight loss

Value of service that consumers forego, plus operating profits that producers forego, because increased price reduces use of the service

## When is the deadweight loss large?

- Additional costs of providing additional service are low
- Value of the additional service to consumers exceeds these costs
- Consumer decisions are sensitive to price
- These are typical characteristics of broadband!

### Example: Costs of Telecom Regulation

Federal expenditures	\$361 million
Non-federal expenditures	\$75.4 billion
Deadweight loss	\$25.5 billion

Source: Jerry Ellig, "Costs and Consequences of Federal Telecommunications Regulation," 58 Federal Communications Law Journal 37 (Jan. 2006).

## What might costs of net neutrality be?

Federal expenditures	Promulgation/enforcement	
Non-federal expenditures	Technology, compliance, etc.	
Deadweight loss	Cost pass-through Non-discrimination may alter price structure	
Quality effects	Services/innovations not deployed?	
Behavioral changes	Less (or more) blogging?	

Agencies laid groundwork for analyzing costs

- FCC asked how to craft rules "only to reach any identified market failures or other specific problems, and not to prevent policies that benefit consumers."
- FTC Staff Report: "The primary reason for caution is simply that we do not know what the net effects of potential conduct by broadband providers will be on all consumers, including, among other things, the prices that consumers may pay for Internet access, the quality of Internet access and other services that will be offered, and the choices of content and applications that may be available to consumers in the marketplace."

6. Compare costs with outcomes

- Cost effectiveness
- Cost-benefit
- Breakeven

Goal is to *understand* what outcomes we get and what we give up, not to automate the decision "Everyone is entitled to his own opinion, but not his own facts"

-- Sen. Daniel P. Moynihan

### For further information...

Mercatus Center Public Interest Comment to the FTC on Broadband Connectivity Competition Policy:

http://www.mercatus.org/Publications/pubID.3714,cfilter.5/pub\_detail.asp

Mercatus Center Public Interest Comments to the FCC on Broadband Industry Practices:

http://www.mercatus.org/Publications/pubID.4067,cfilter.5/pub\_detail.asp http://www.mercatus.org/Publications/pubID.4155/pub\_detail.asp

#### Federal Trade Commission Workshop on Broadband Connectivity Competition Policy:

http://www.ftc.gov/opp/workshops/broadband/index.shtml