



University of
Zurich^{UZH}

Network Neutrality Laws: The Swiss Case Study

Department of Informatics
Seminar: Communication Systems

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Kate Gadola, Cynthia Aludogbu



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Historical Background

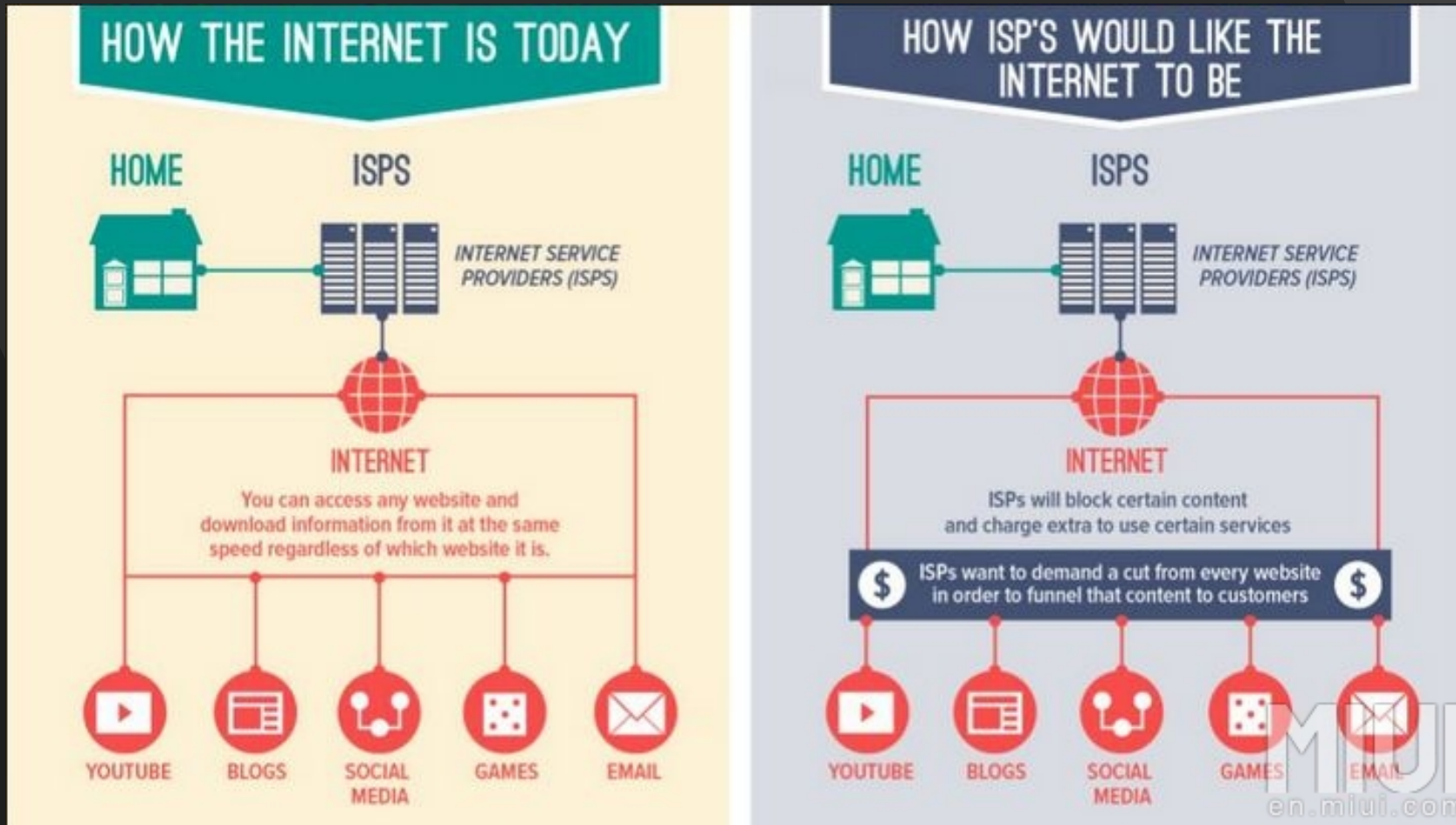
Communications Act of 1934

- FCC (Federal Communications Commission)
- common carrier

Telecommunications Act of 1996

- reduce entry barriers to market

What is Net Neutrality?



Actors in Data Delivery

Content
Providers

Internet
Service
Providers

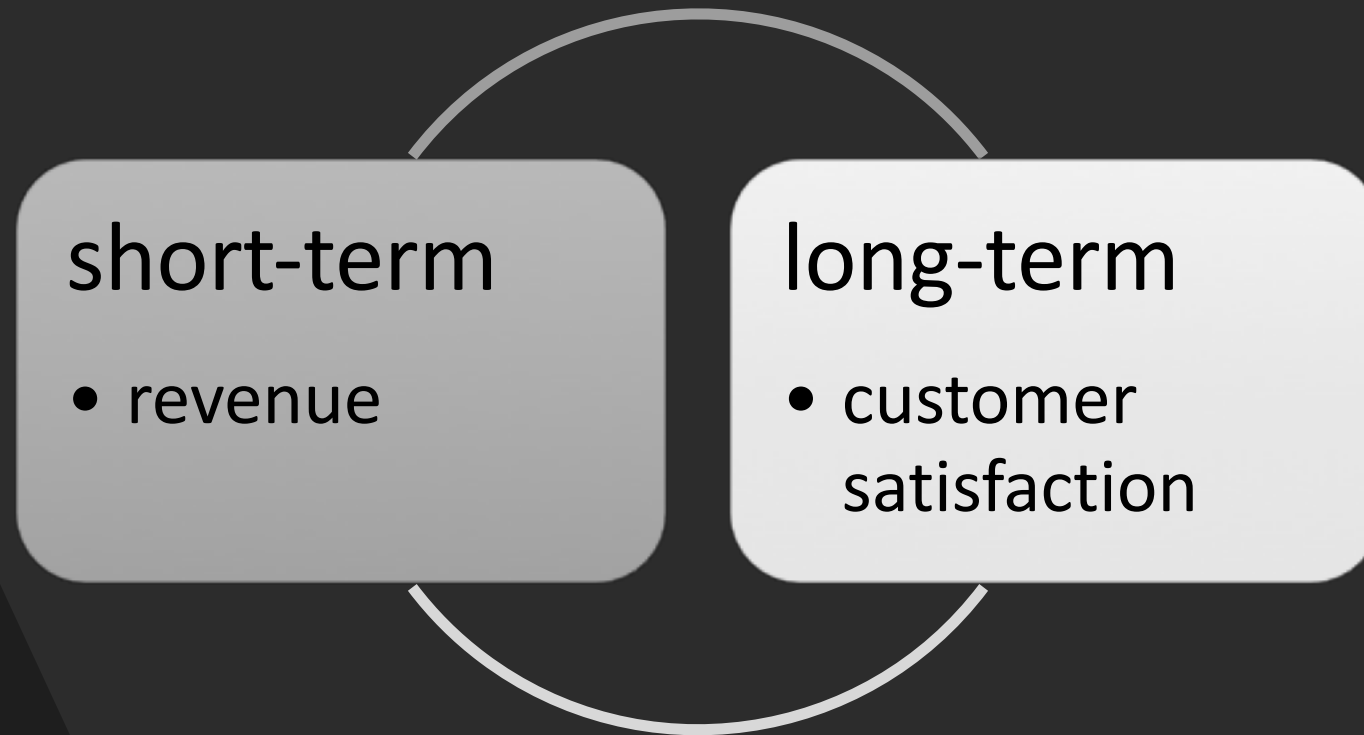
Content
Delivery
Networks

Web Portals

Violating Net Neutrality Principles - ISPs

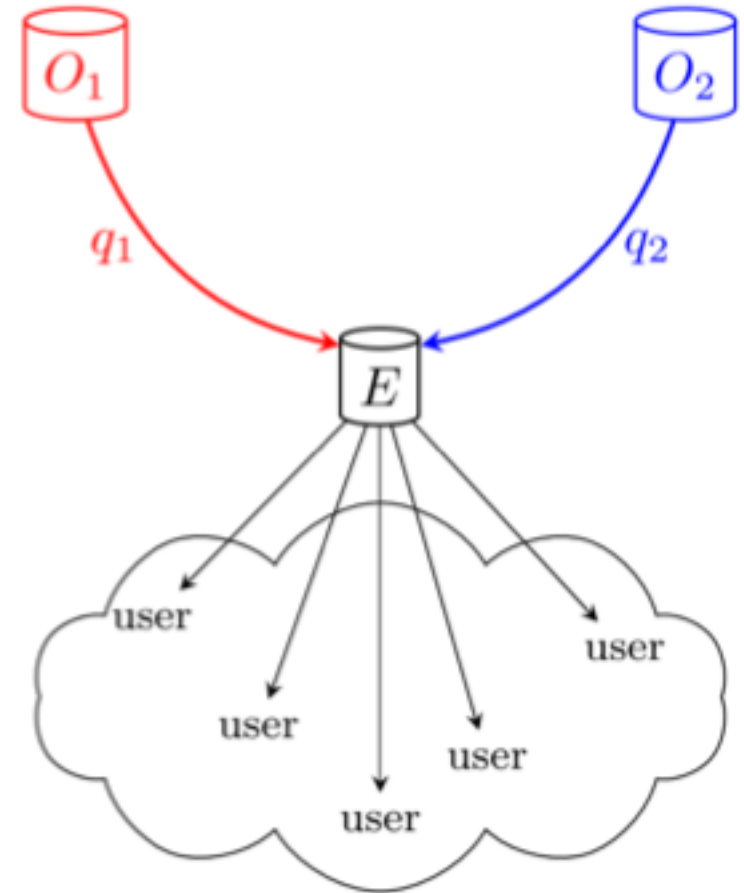
quality differentiation	vertically integrated services
commercial differentiation	exclude services from data caps

Violating Net Neutrality Principles - Search Engines



Violating Net Neutrality Principles - CDNs

- Quality of Experience
- CPs provide content in Origin Servers (O)
- Content stored in CDN's Edge Servers (E)

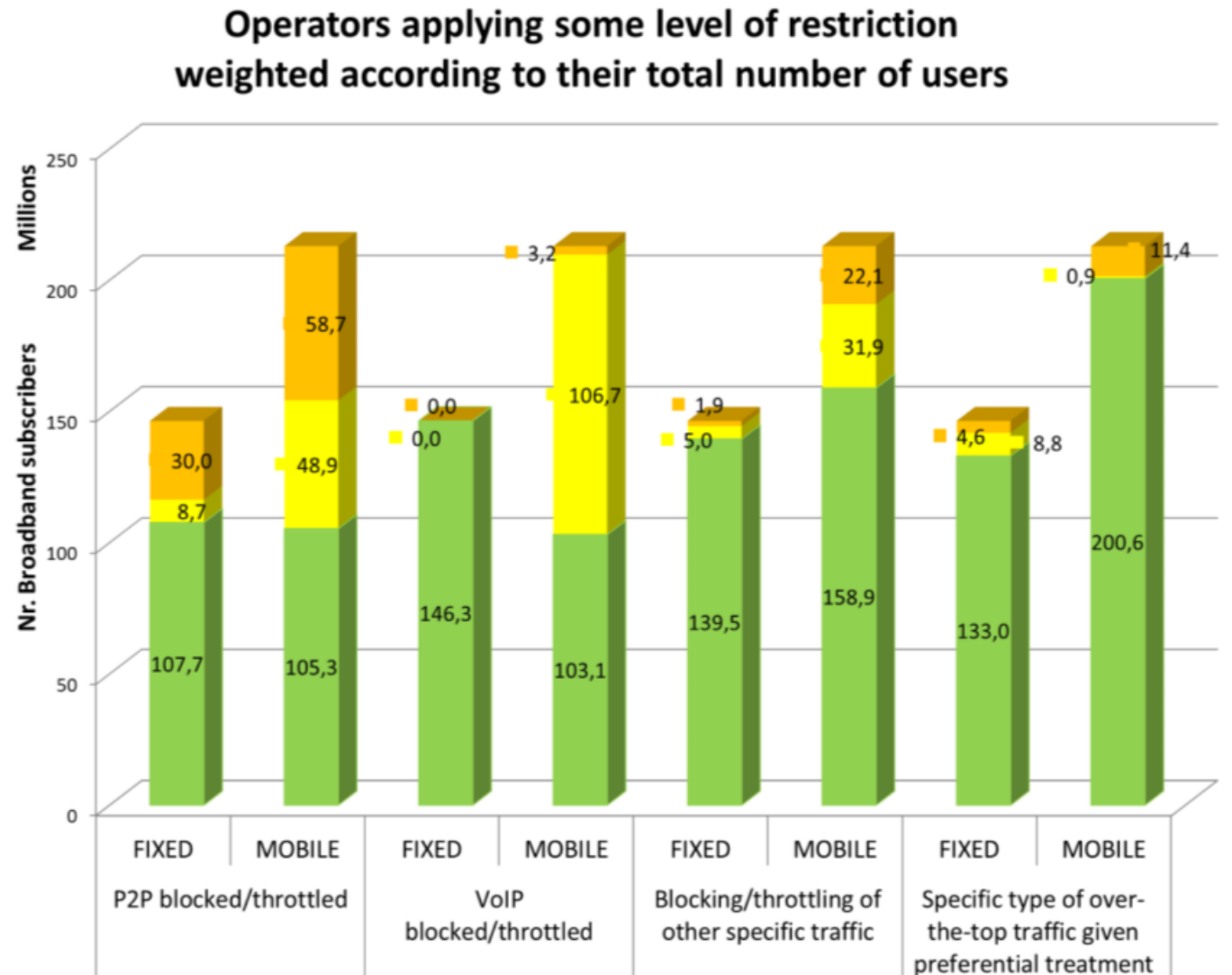


Net Neutrality in Switzerland

Legal Status

Current Situation

- report by BEREC in 2012 covering 414 telecommunication providers in Europe



- Number of users clients of operators which restrict considered application for all their users
- Number of users clients of operators which restrict considered application for some of their users only
- Number of users clients of operators which do not restrict considered application for any of their users

Market in Switzerland

blocking
services

exclude services
from data
volume cap

favouring
services

Arguments for and against Net Neutrality regulation

Opponents of Net Neutrality

- internet has developed without regulation to date
- the market would punish wrongdoings; additional legislation not necessary
- network management is essential for optimum network usage
- necessary to prioritise time-critical services
- would hinder competition and innovation
- network-to-network data transport is international

Proponents of Net Neutrality

- network operators could favour their own services
- risk to freedom of information, diversity of opinion and media pluralism
- network operators can easily fund expansion of infrastructure
- quality differentiation might motivate ISPs not to expand internet access
- would hinder competition and innovation

Approaches under Discussion for

Net Neutrality Regulation

Net Neutrality Laws Around the World

- Protection
- Considering protection
- No protection
- Research pending



Net Neutrality Law In USA

What does the U.S
repeal on net
neutrality mean
for Americans?

Possible impact of
the new net
neutrality law on
U.S economy

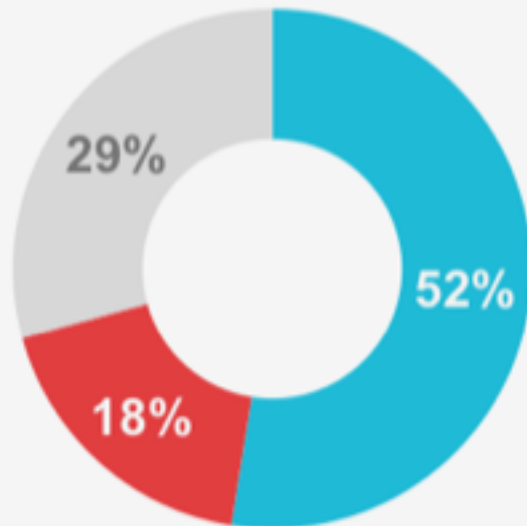
Obstacles of the
new net neutrality
law in the USA

The beneficiaries
of the new law:
individuals vs
companies

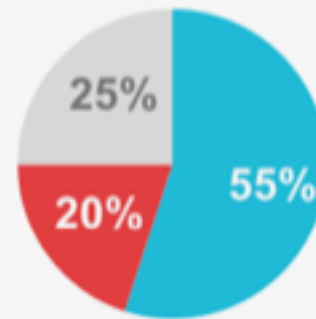
Do you support or oppose net neutrality, a set of rules adopted by the FCC which say Internet Service Providers such as Comcast, Time Warner, AT&T and Verizon cannot block, throttle or prioritize certain content on the internet?

ALL AMERICANS

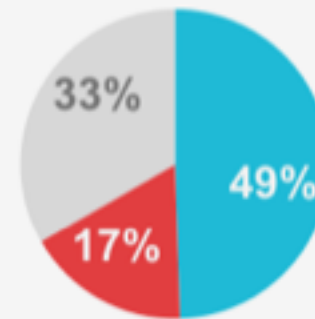
■ Support ■ Oppose ■ Don't know



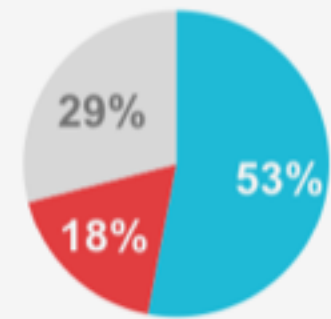
DEM.



IND.

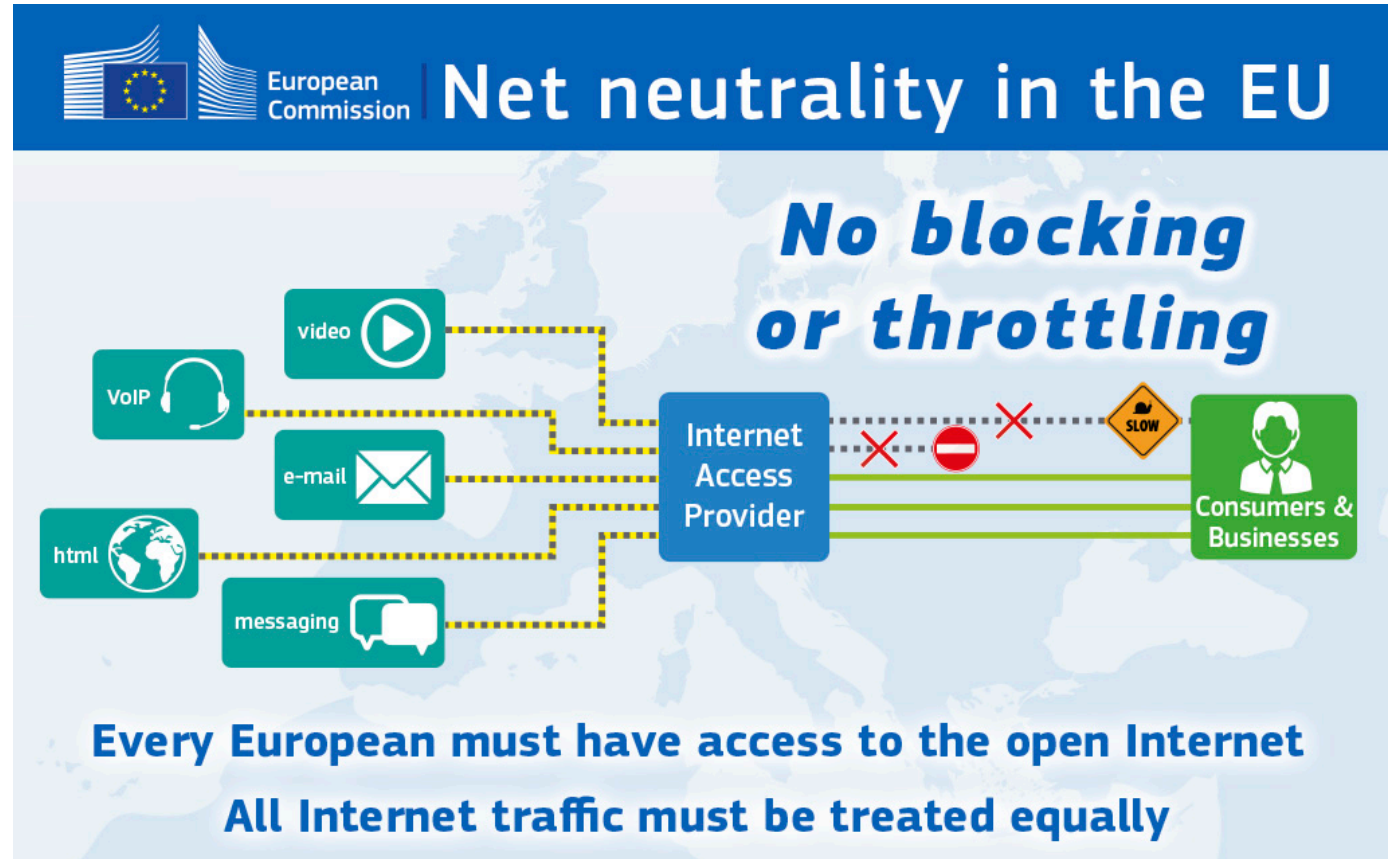


REP.



European Union

- Current Net Neutrality law in the EU
- What does the new Net Neutrality law in the USA mean for the EU?



Comparing Net Neutrality Laws in Switzerland, USA and the EU

- Switzerland → ***No protection***
- United States → No protection
- European Union → Protection

Questions?

Discussion

What is your opinion on Net Neutrality regulation?
Should laws be established in Switzerland?

Discussion

Do you think you as consumer would benefit if Net Neutrality laws were enforced? (Why/how?)

Discussion

Is it right to charge more for services that consume more bandwidth, such as Netflix?

Discussion

Have you ever experienced/noticed any sort of traffic shaping?

Discussion

How will the U.S. decision affect other countries?