Net Neutrality
&
Non-BIAS Data Services

Open Technology Institute at New America, Public Knowledge, Barbara van Schewick, Scott Jordan

March 22, 2024

Comcast sparks field trials of low-latency DOCSIS

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Jeff Baumgartner, Senior Editor
June 16, 2023

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over BIAS

NETWORK   PRESS RELEASE

T-Mobile Expands World's First Network Slicing Beta to Developers Nationwide

September 26, 2023

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non-BIAS data service?

Verizon Demo: Network Slicing Improves Video Performance for Public Safety

Posted on December 5, 2023 9:11am by Phil Britt

5G   Verizon

enterprise service

1) Evasion

2) Innovative offers <u>as part of BIAS</u>

3) Impact on capacity & performance

1) **Evasion**

2) **Innovative offers <u>as part of BIAS</u>**

3) **Impact on capacity & performance**

"If the Commission determines that

a particular service is '. . . [being] used to evade the [Open Internet] protections,'

we will take appropriate enforcement action."

2015 Open Internet Order, para. 210, citing 2010 Open Internet Order, para. 113

Clarify when
providing a <u>different type of service</u> to applications <u>evades</u> the Open Internet protections

Such offers evade the Open Internet protections unless:

- the particular type of application requires a specific level of quality of service, which is objectively necessary for the specific type of application,

- that cannot be met over a well-provisioned broadband Internet access service in compliance with the Open Internet protections (including via the type of application-agnostic, user-controlled, and user-paid Quality of Service described next).

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Transparently disclose objective technical evidence that clearly demonstrates:

- The specific level of quality of service objectively required by the specific type of application (e.g., video conferencing); and

- These Quality of Service requirements cannot be met by a well-provisioned BIAS service.

1) **Evasion**

2) **Innovative offers <u>as part of BIAS</u>**

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Net neutrality-friendly Quality of Service

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4) **Protecting the quality of the default BIAS service**

4) Protecting and improving the quality of the "best effort" Internet

- The introduction of the additional types of service does not significantly degrade the performance of the default BIAS service available at that time; and

- the capacity and performance of the default BIAS service continue to improve over time.

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   -> violates the no-throttling rule

3) **End user-paid (?)**

   -> violates the no paid prioritization rule,

   if charging edge provider

Why allow application-agnostic, user-controlled, user-paid Quality of Service as part of BIAS?

- competition
- innovation
- user choice
- fuel the virtuous cycle

NN
friendly
QoS

NN
friendly
QoS

1) **Evasion**

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3) **Impact on capacity & performance**

Impact of
permissible specialized services on
capacity & performance of BIAS

Specialized services
may harm the open Internet
by degrading BIAS

Specialized services
may harm the open Internet
by degrading BIAS

FCC took steps to prevent that

2010

ensure that specialized services
do not constrict or retard the growth of
the capacity available for BIAS

2015

Authority to intervene
if specialized services harm the open internet

2015

Authority to intervene
if specialized services harm the open internet

1) Capacity isolation

2015

Authority to intervene
if specialized services harm the open internet

1) Capacity isolation

2) Disclose impact of specialized services on capacity and performance of BIAS

update guidance

in response to technical developments

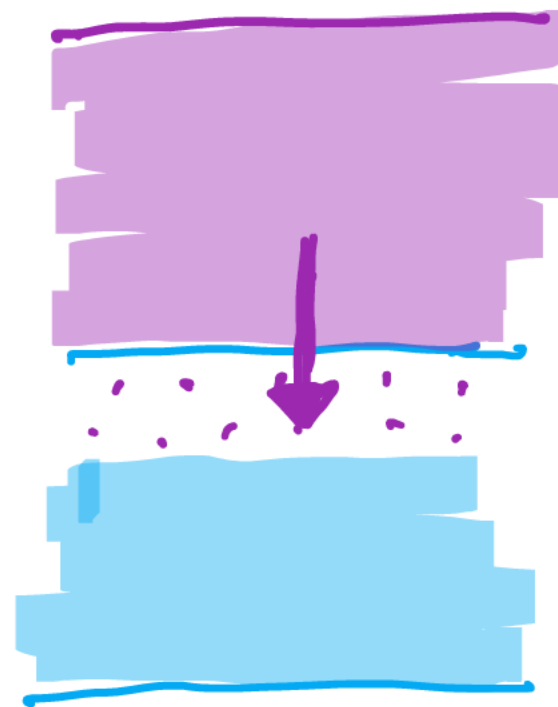# Separate capacity

non
BIAS
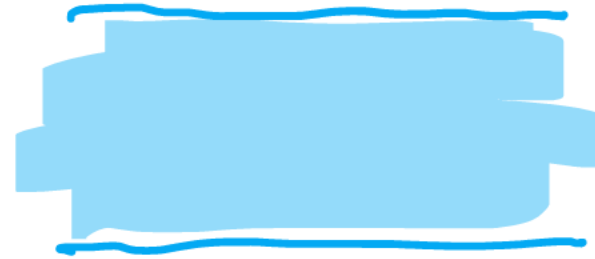
BIAS

Dynamically share capacity

non
BIAS

BIAS

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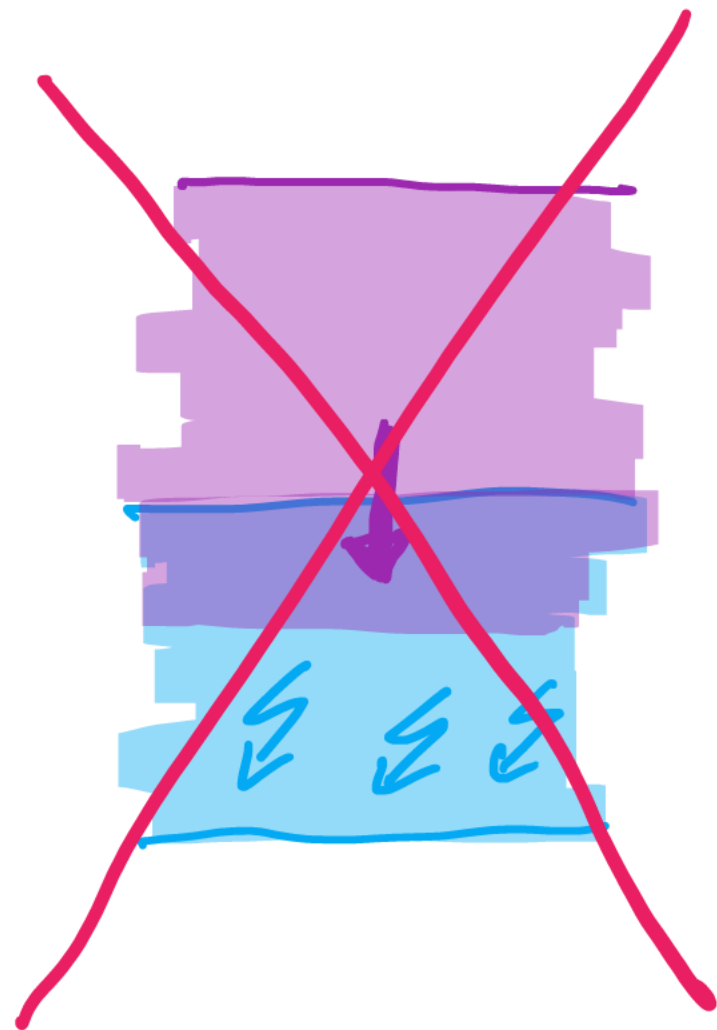BIAS

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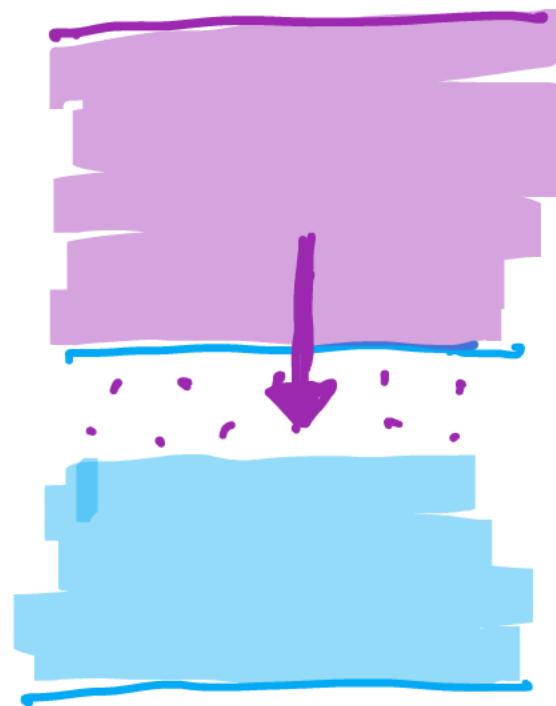

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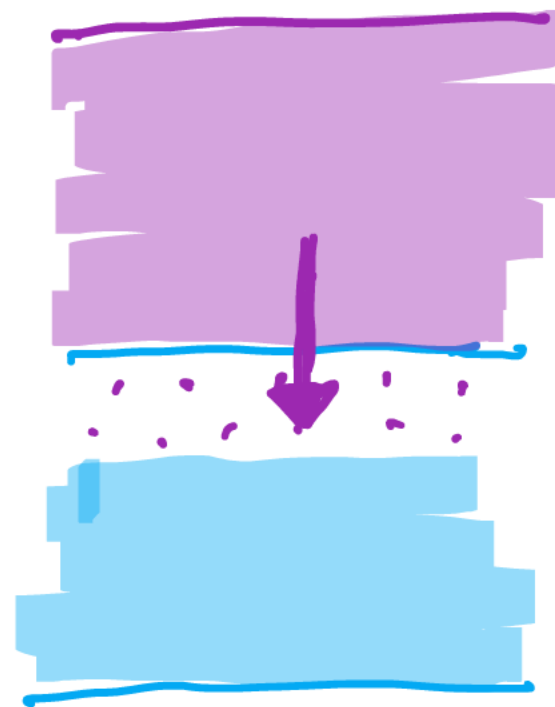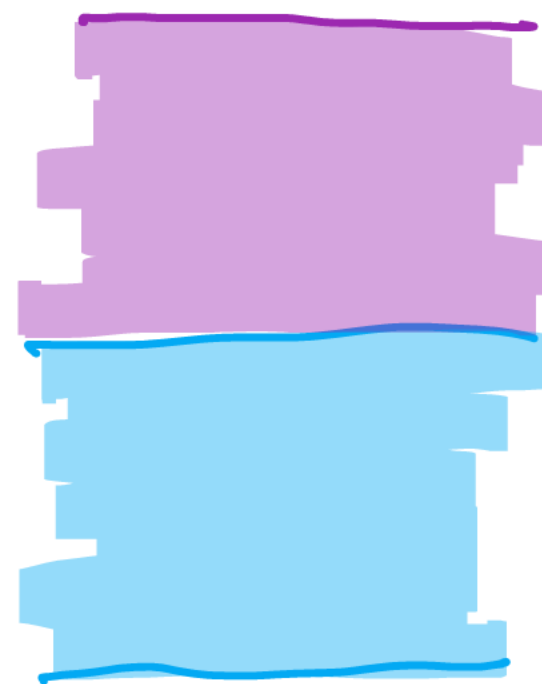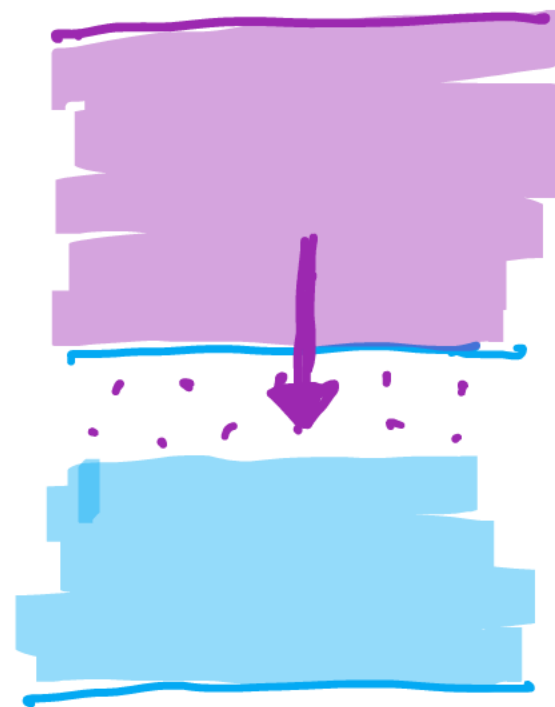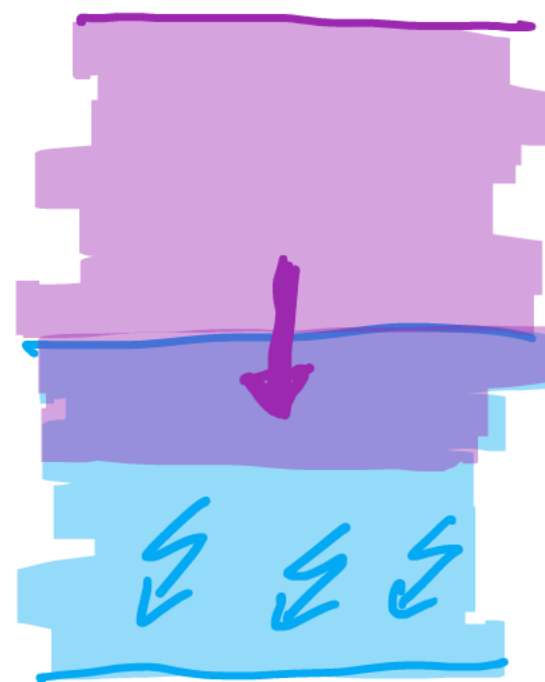
BIAS

Dynamically share capacity

non
BIAS

BIAS

Any non-BIAS data service:

1. may only minimally affect the performance of BIAS, including during times of congestion, and

2. may not constrict or slow the growth of the capacity available for, and the performance of, BIAS over time.