

# **Network Slicing and Net Neutrality: No Throttling Rule**

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# 2015 no-throttling rule

- brightline rule
- explicitly prohibited ISPs from “impairing or degrading” apps or kinds of apps

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Brightline rules benefit startups, small businesses,  
and marginalized voices

# 2024 no-throttling rule

Changes brightline rule to new, vague, undefined, and unworkable case-by-case standard for speeding up apps and classes of apps

Significant change that will harm  
average users, startups, small businesses &  
marginalized voices

# 5G fast lanes are coming

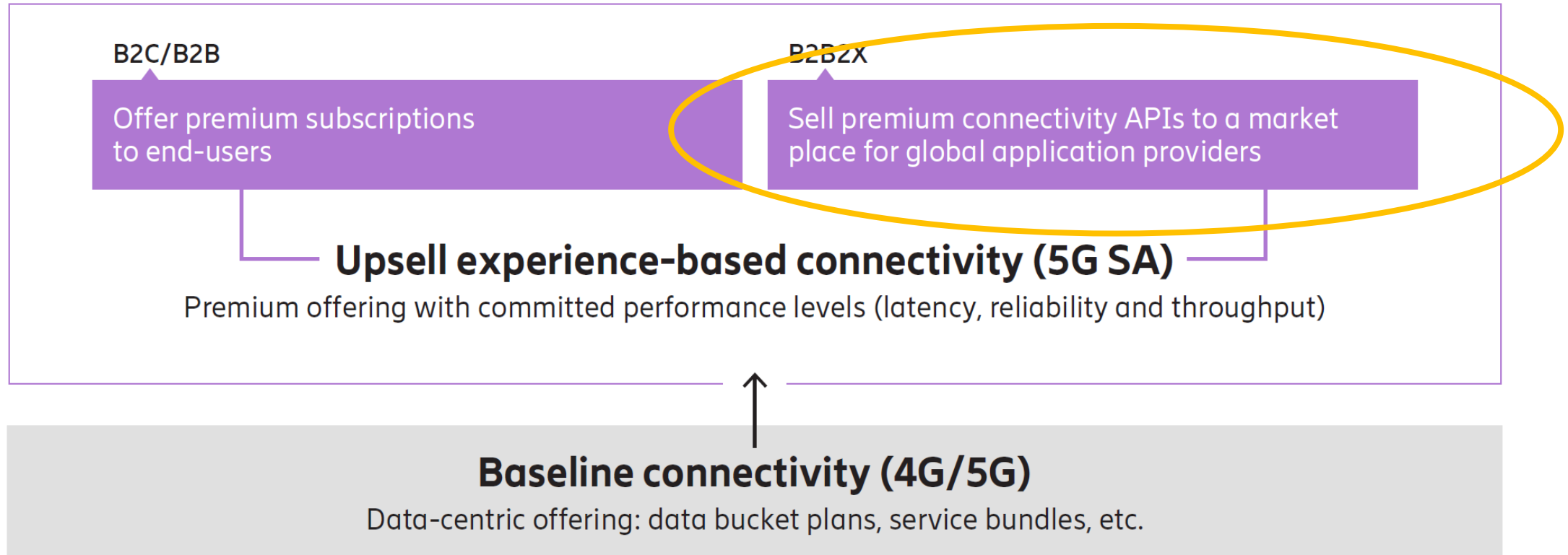
NETWORK PRESS RELEASE

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

September 26, 2023

Video calling beta program now available to developers across the country, including Android developers on the Samsung Galaxy S23 series

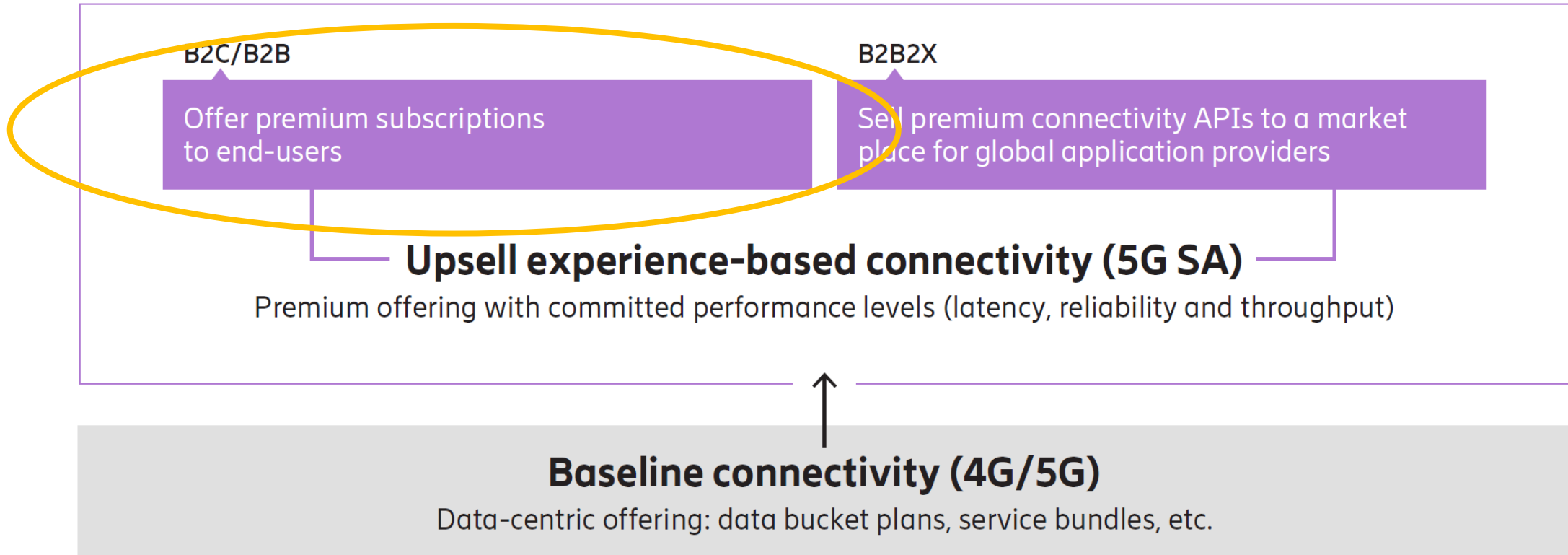
## Charge the app provider



**Model 1:  
charge the content provider**

**-> foreclosed by ban on paid prioritization**

## Charge the BIAS subscriber





**Model 2:**

**charge the BIAS subscriber**

-> at stake in debate over no-throttling rule

**Draft order opens the door to  
ISP-controlled fast lanes  
for select apps & kinds of apps**

**Harms**

**Immediate harm to users:**

**Premium slices for certain categories of apps  
result in worse performance for everything else.**

## Ericsson's proposed plan for US ISPs' premium slices for mobile gaming:

- Two premium gaming slices as an add-on for \$10.99 and \$5.49 per month
- premium slices have priority, including during congestion
- regular mobile broadband gets what's left "after serving both gaming slices"

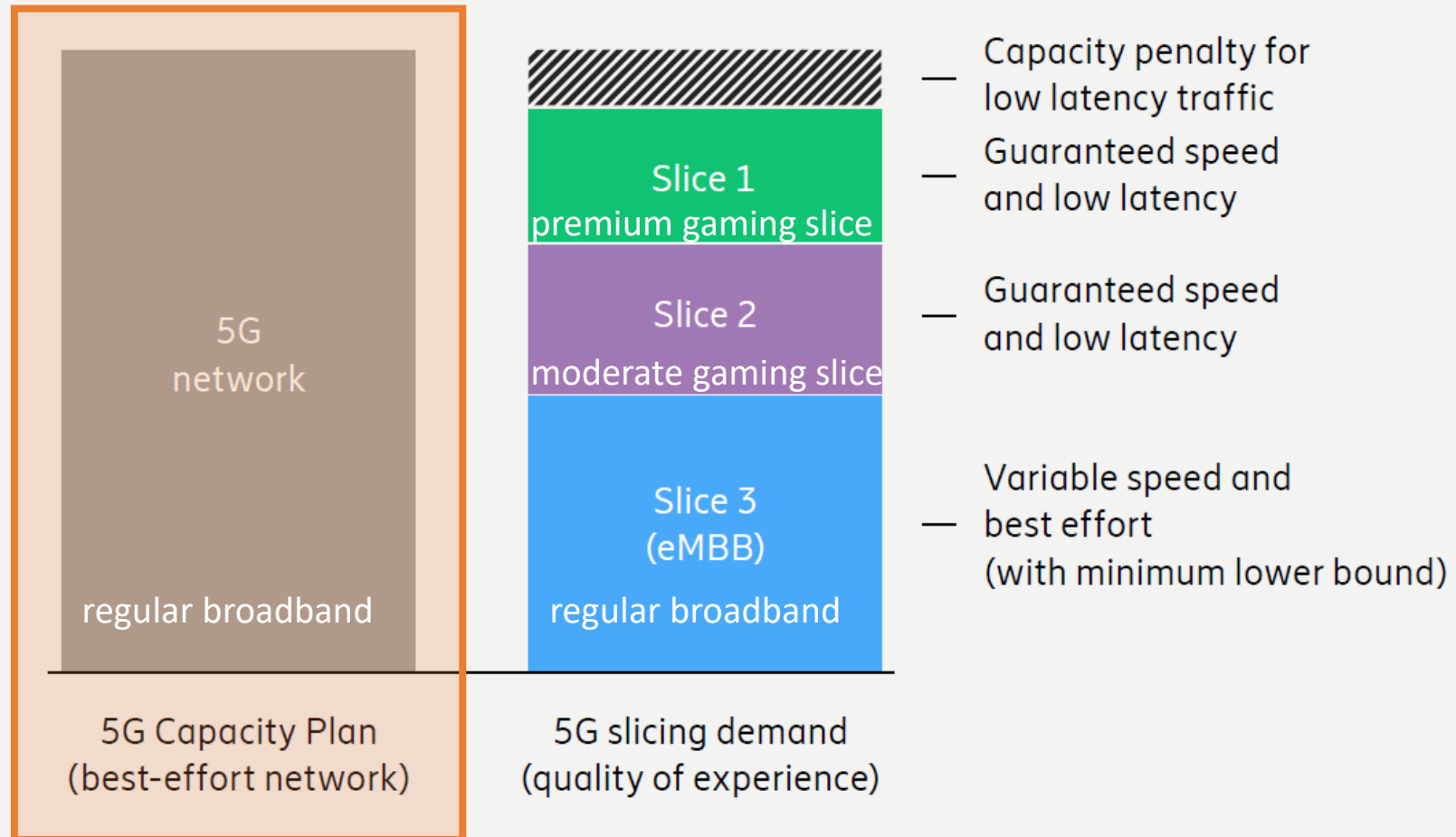


premium performance slice	$\geq 15$ Mbps & device-radio latency of 25 ms	\$10.99
moderate performance slice	$\geq 6$ Mbps & device-radio latency of 25 ms	\$5.49
mobile broadband service	best-effort uses "available system capacity after serving both gaming slices"	

Figure 3: Evaluating 5G capacity and economics with slices

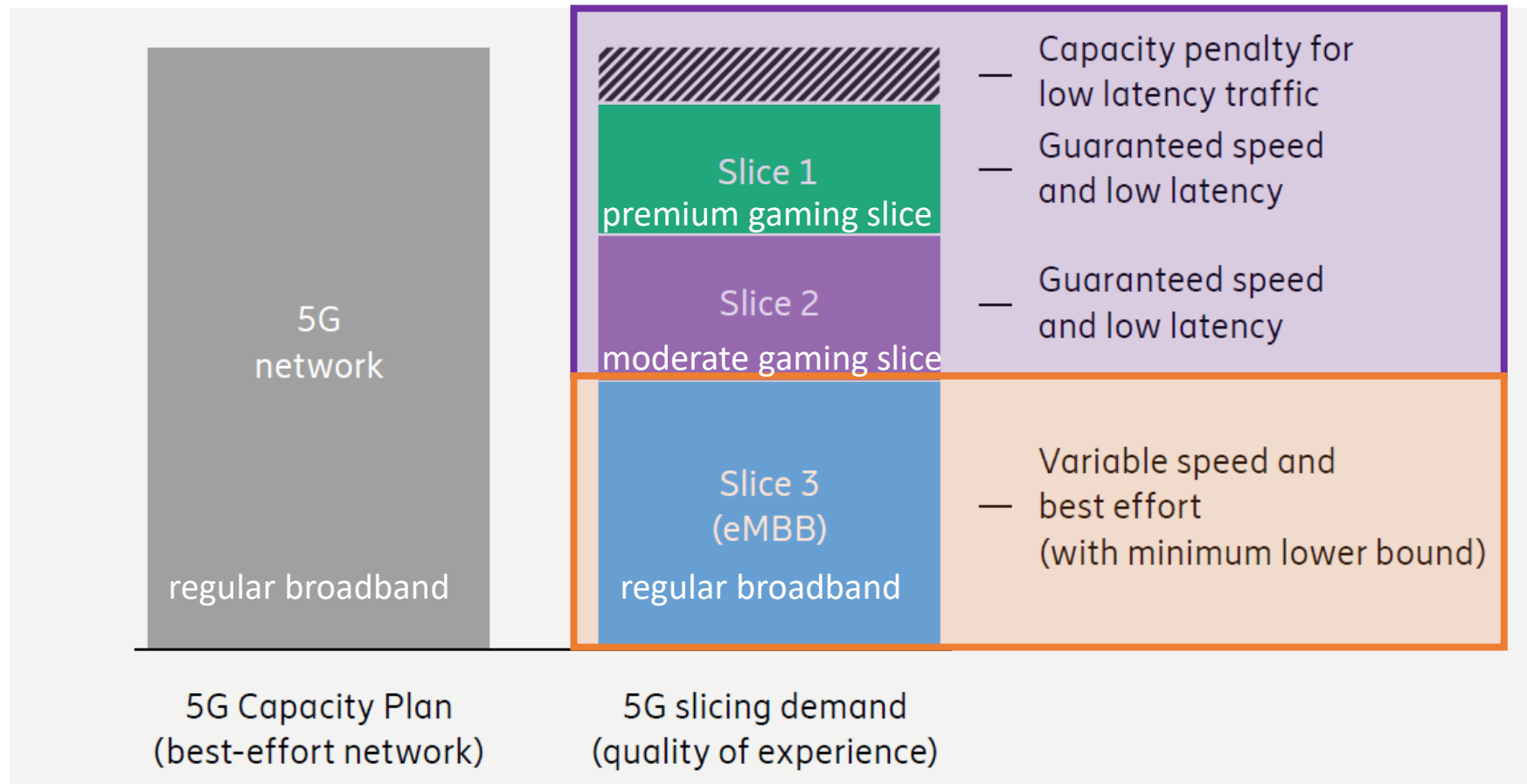
Currently, all capacity is used for regular internet, benefitting everyone (all apps and all consumers)

5G Capacity Plan meets projected demand of various slices



Once the premium slices are offered, a significant amount of overall capacity (in purple) is used for the gaming slices. Regular broadband (in orange) gets what's left.

Games in the premium slice and the people who can afford them get good performance. Everyone else (apps and people who can't afford the premium slice) has worse performance.



**Harm to users over time:**

**Performance improvements  
primarily benefit apps in premium slices.**

**Regular broadband improves less than it would otherwise.**



Figure 5B: Served demand in network busy hour, 5G best effort vs 5G with gaming slices

5G Capacity Plan (best effort)
  Low-latency capacity penalty
  Advanced gaming slice  
 Moderate gaming slice
  eMBB average

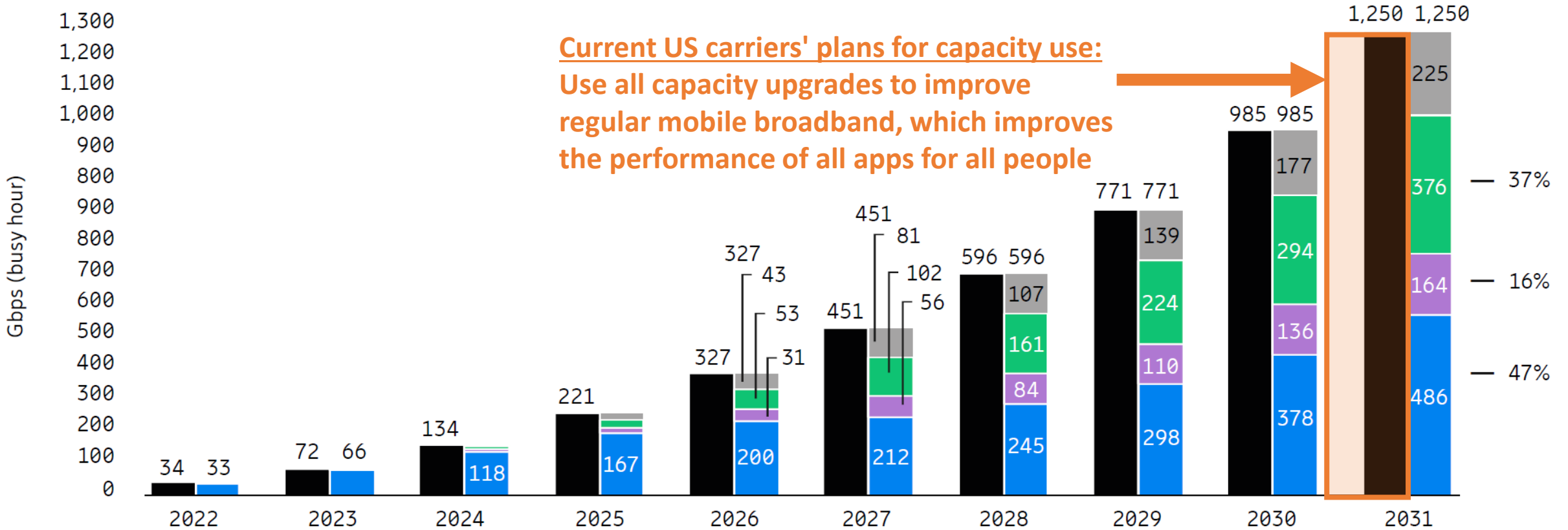


Figure 5B: Served demand in network busy hour, 5G best effort vs 5G with gaming slices

5G Capacity Plan (best effort)
  Low-latency capacity penalty
  Advanced gaming slice  
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**Capacity use with premium slices:**

- **capacity needed for premium slices: 53%**
- **capacity left for regular broadband: 47%**

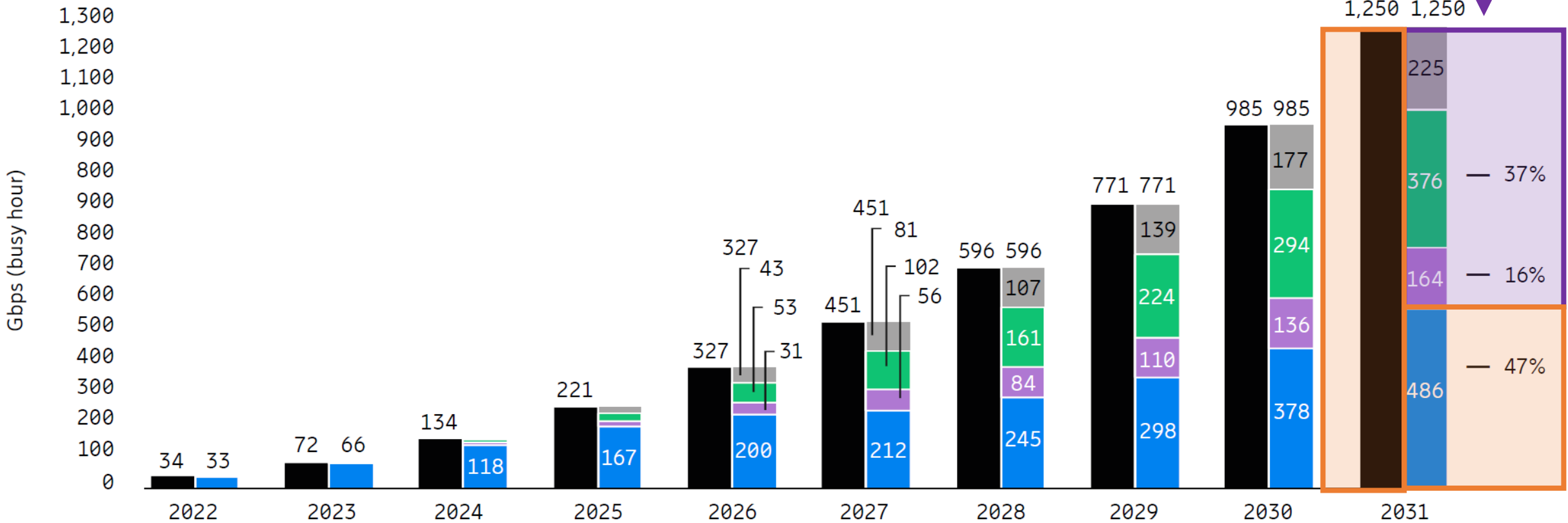
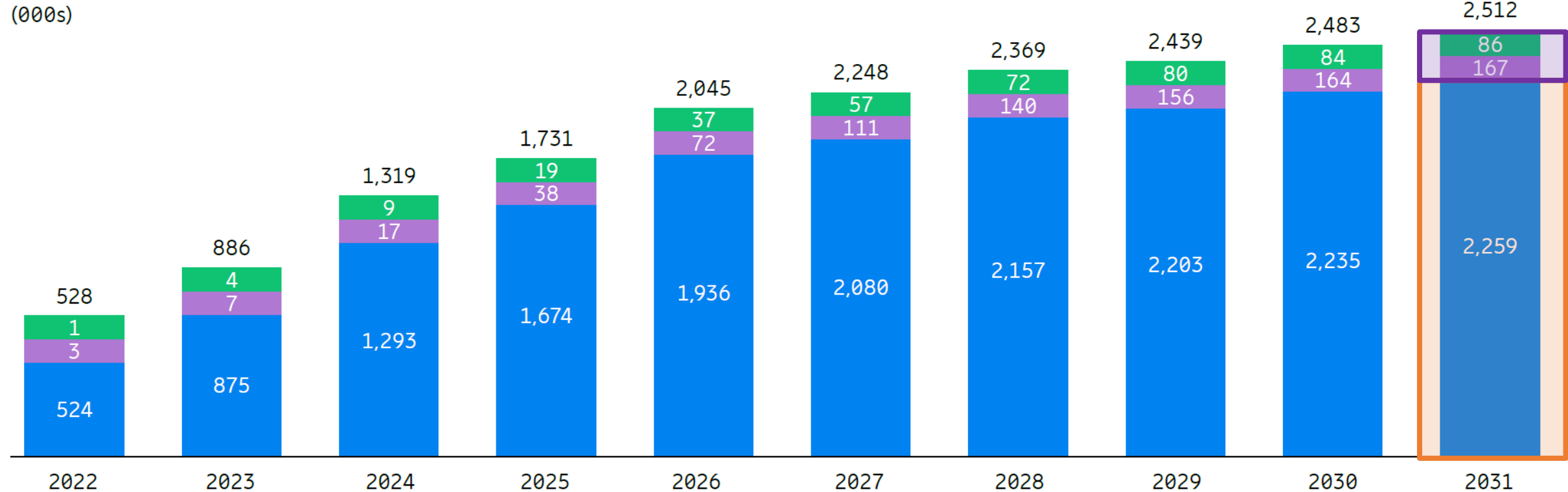


Figure 4B: Gaming slices–subscriber adoption forecast<sup>17</sup>

Capacity use with premium gaming slices by 2031:

- 10% of users (the ones using premium gaming slices) get 53% of the capacity
- 90% of users get 47% of the capacity for regular broadband

■ eMBB subs   ■ Moderate performance gamers   ■ Advanced performance gamers



**Harm to users over time:  
The regular internet gets worse.**

**Letting ISPs decide which apps get to be in a fast lane  
violates core net neutrality principles  
and distorts the market**

**ISP-controlled fast lanes for apps or specific apps  
interfere with user choice and distort competition**

**ISP-controlled fast lanes  
hamper startups & small businesses  
and help cement platform dominance.**

Top 20 Zero-Rated Apps in the EEA

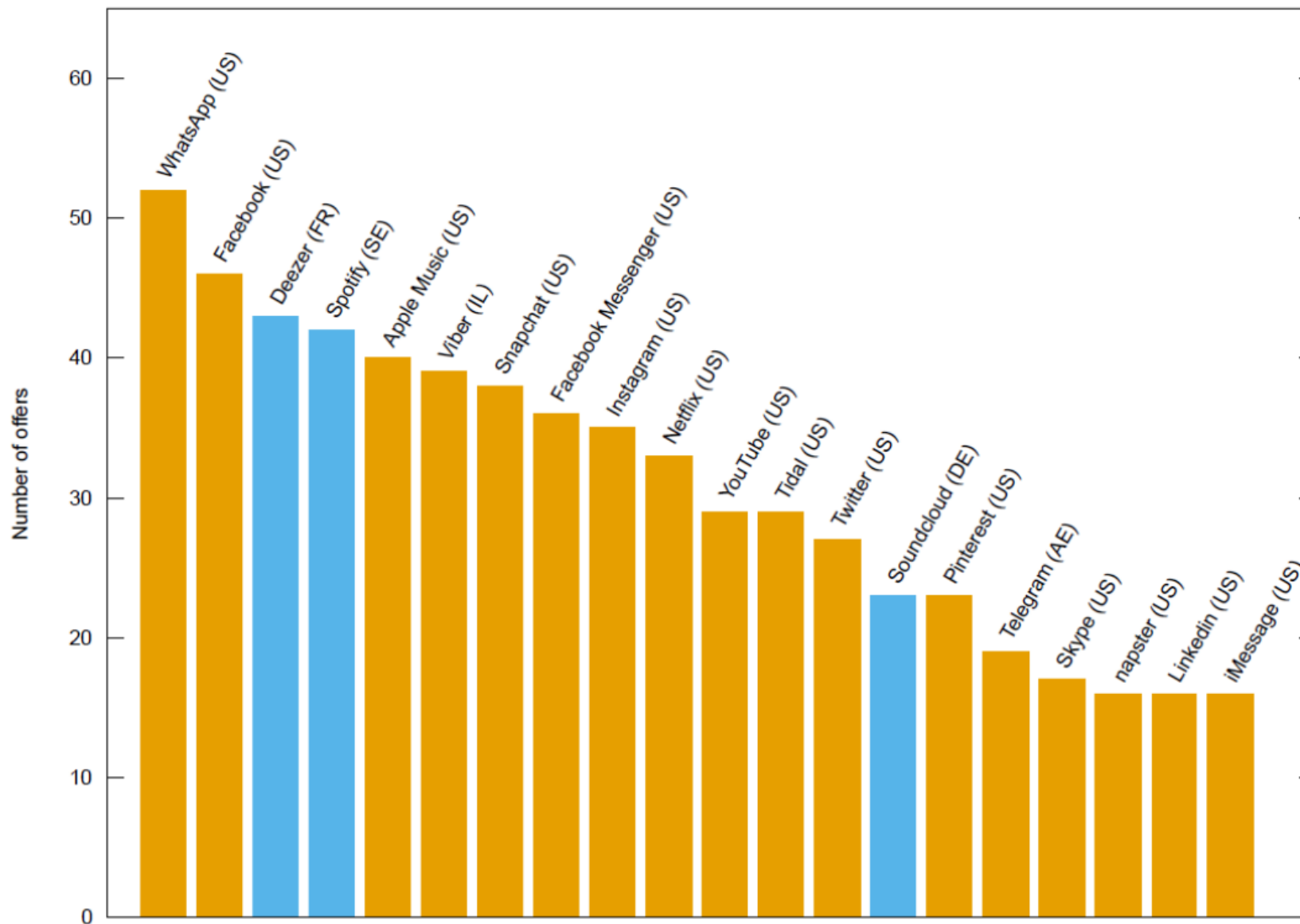


Illustration 7: Top 20 zero-rated apps in differential pricing offers in the EEA. Offers from the EEA are highlighted in blue.



# 2024 no-throttling rule (for speeding up)

Changes brightline rule to new, vague, undefined, and unworkable case-by-case standard

Significant change that will harm  
average users, startups, small businesses &  
marginalized voices

## 2014/2015 Net Neutrality Fight: Only Title II allowed brightline rules.

### Speaker Nancy Pelosi, Letter to Chairman Wheeler, September 8, 2014

"Innovators (need) bright-line rules. I believe the FCC should follow the court's guidance and reclassify broadband...under Title II... Importantly, Title II designation gives the FCC certainty to protect consumers."

### President Obama Urges FCC to Implement Stronger Net Neutrality Rules, November 10, 2014

"The rules I am asking for are simple, common-sense steps that reflect the Internet you and I use every day ... . These bright-line rules include:

- **No blocking.** ...
- **No throttling.** Nor should ISPs be able to intentionally slow down some content or speed up others — through a process often called “throttling” — based on the type of service or your ISP’s preferences.
- **Increased transparency.** ...
- **No paid prioritization.** ..."

**Commissioners seem to have understood the 2015 no-throttling rule as prohibiting speeding up and slowing down of apps.**

**Commissioners' Statements on the adoption of the  
2015 Open Internet Order**

**Commissioner Jessica Rosenworcel**

"We cannot have a two-tiered Internet with fast lanes that speed the traffic of the privileged and leave the rest of us lagging behind."

**Commissioner Mignon Clyburn**

"No Blocking, No Throttling, No Paid Prioritization. The item contains strong, clear rules to ensure that all content, all applications and all bits are treated equally. These are all essential to the free market and this is pro-competitive."

## 2015 no-throttling rule

- explicitly prohibited ISPs from impairing or degrading apps or classes of apps

People understood 2015 no-throttling rule to implicitly prohibit ISPs from speeding up or otherwise preferentially treating apps

or classes of apps.

Preferential treatment of some apps necessarily “impairs or degrades” other content, applications, or services not given the same treatment, either technically or economically

Requested clarification would make *implicit* understanding *explicit*. 30

**Brightline rules provide certainty to the market.**

No harms to apps & consumers because ISPs don't violate brightline rules. Simple complaint process that works for users, startups, and small businesses.

Low enforcement costs.

**Brightline rules are what the 2014/2015 net neutrality fight was all about.**

That's how the FCC draft order treats slowing down of apps & classes.

**For speeding up, the 2024 draft order proposes a new vague, undefined case-by-case standard.**

Not clear which speeding up of apps & classes is prohibited until after lengthy & costly FCC enforcement proceedings for each ISP offering.

No certainty for startups & investors. Apps & consumers are harmed while these plans are on the market.

FCC has maximum flexibility whether to allow or prohibit each offering.

Process favors large companies.

After 2015, this approach failed to prevent harmful zero-rating plans.

**Even Republican net neutrality bills  
have a brightline no-throttling rule that prohibit ISPs  
from speeding up & slowing down apps and kinds of apps.**

**Thune, Walden, Upton: Net Neutrality Discussion Draft (2015)**

An ISP “may not throttle lawful traffic by selectively slowing, speeding, degrading, or enhancing Internet traffic based on source, destination, or content [i.e. apps or classes of apps], subject to reasonable network management.”

**Walden: HR 1101 (2019), co-sponsored by 19 Republicans**

An ISP “may not throttle lawful traffic by selectively slowing, speeding, degrading, or enhancing internet traffic based on source, destination, or content [i.e. apps or classes of apps], subject to reasonable network management.”

**Coffman (R-Denver): HR 6393 (2018)**

“No throttling. A broadband internet access service provider may not:

(1) impair, degrade, slow down, speed up, or enhance lawful internet traffic on the basis of internet content, application, source, destination, service, or use of a non-harmful device, or any particular class of content, application, source, destination, service, or non-harmful device, subject to reasonable network management.”