

IPv6 Deployment

A Global Perspective

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AIS 2018

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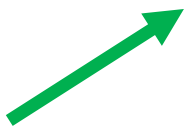
Is the Room Full or Empty?



Picture on
the Left:

Google
IPv6
Stats...

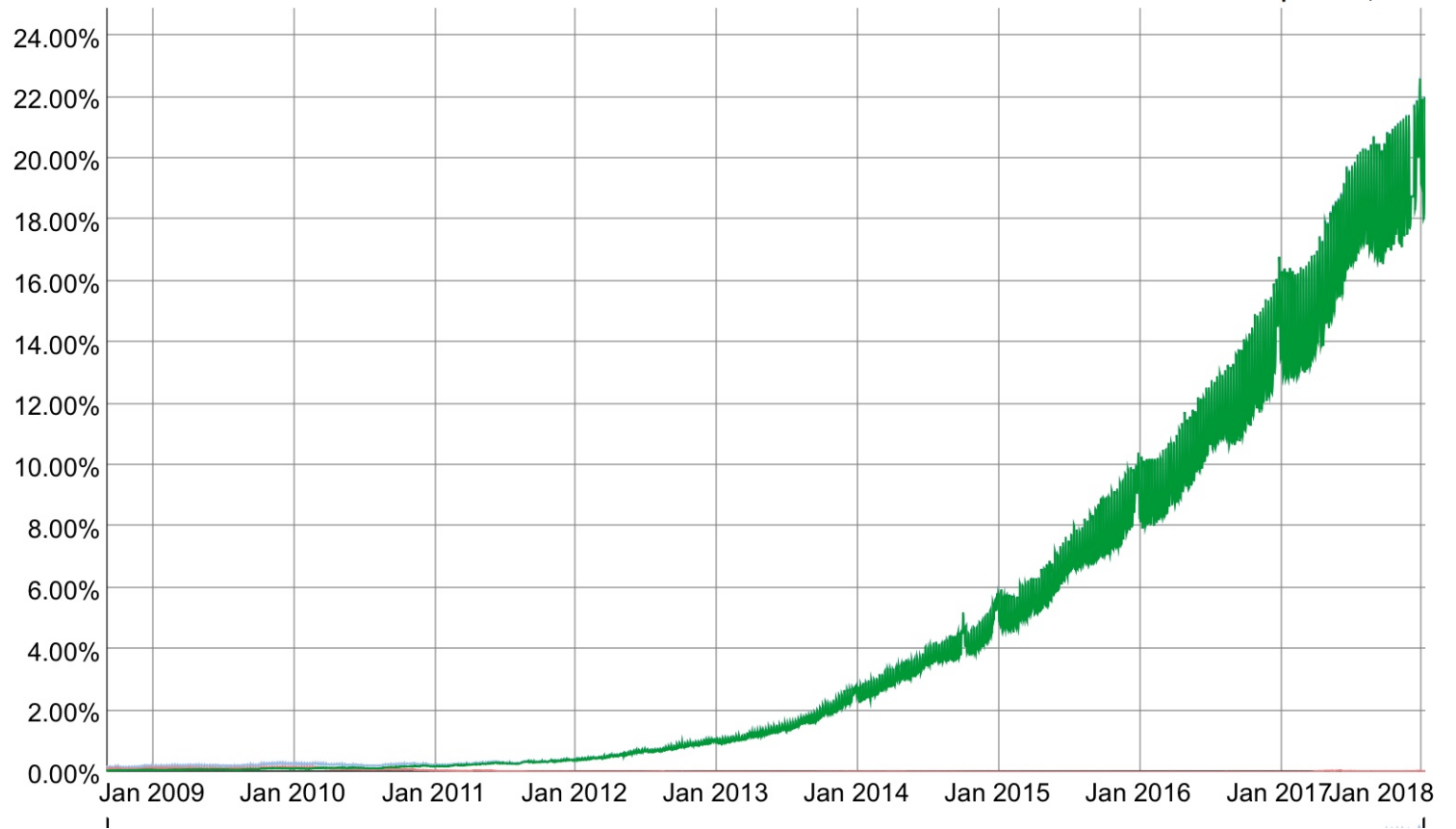
Up and to
the Right!



IPv6 Adoption

We are continuously measuring the availability of IPv6 connectivity among Google users. The graph shows the percentage of users that access Google over IPv6.

Native: 21.26% 6to4/Teredo: 0.03% Total IPv6: 21.29% | Jan 14, 2018

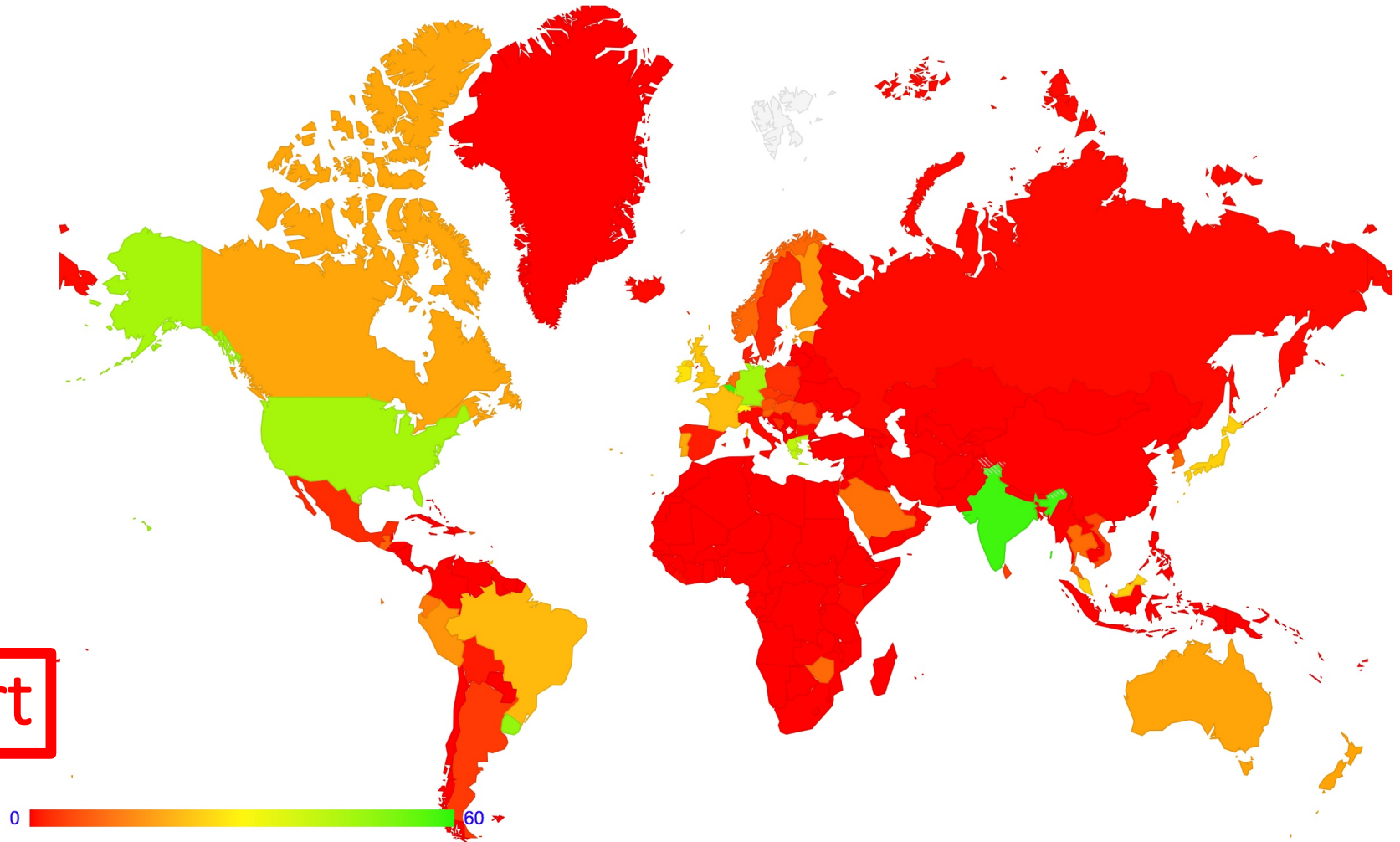


IPv6 Capable Rate by country (%)

Picture
on the
Right:

APNIC
IPv6
Stats...

Red Alert



It Actually Looks Worse the
Closer You Get...

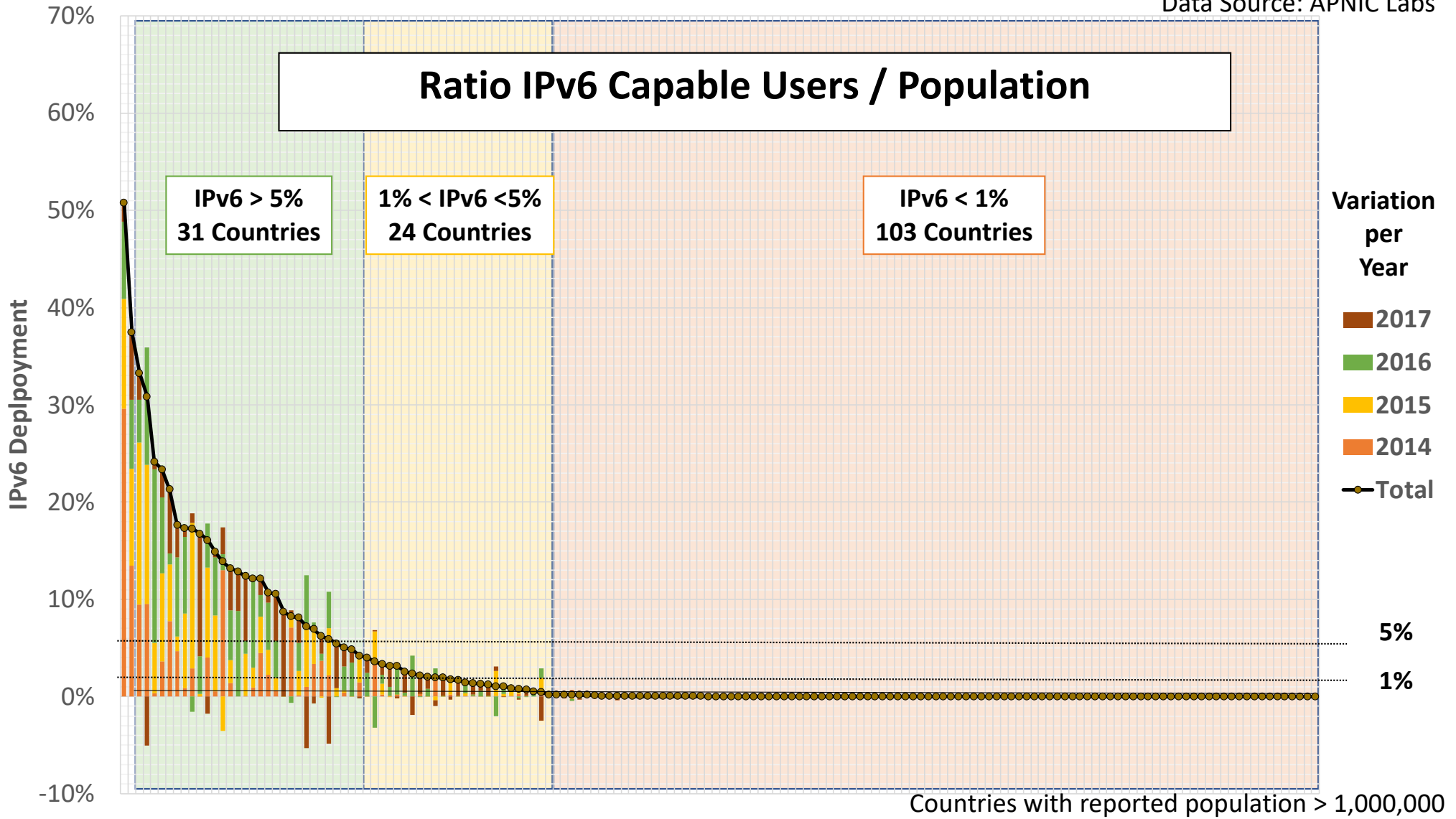
It Actually Looks Worse the Closer You Get...

The same 30+ countries have done something about IPv6 year after year, while the rest appear to have continuously done very little...

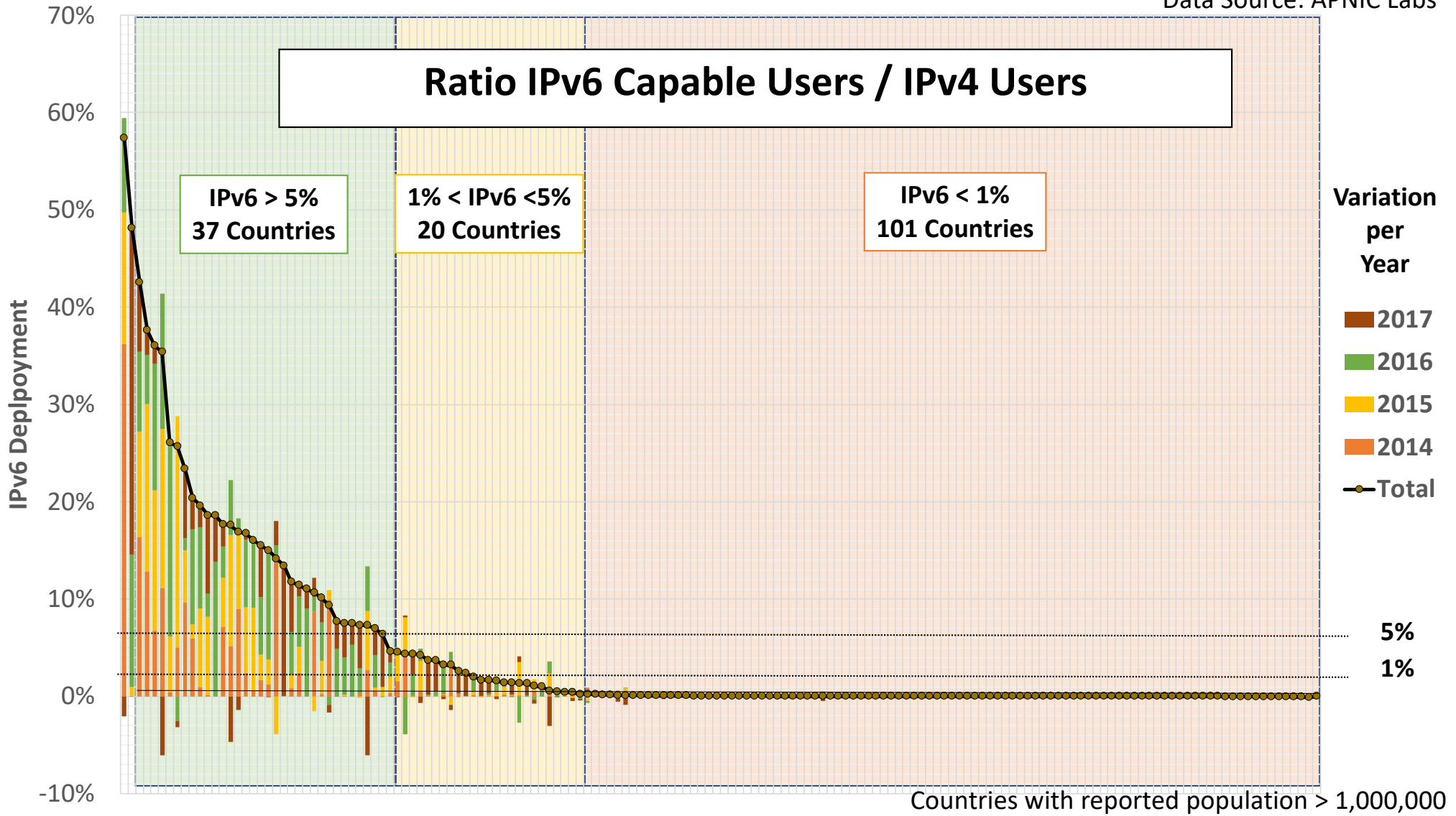
It Actually Looks Worse the Closer You Get...

For some, IPv6 penetration has plateaued or gone down...

Ratio IPv6 Capable Users / Population

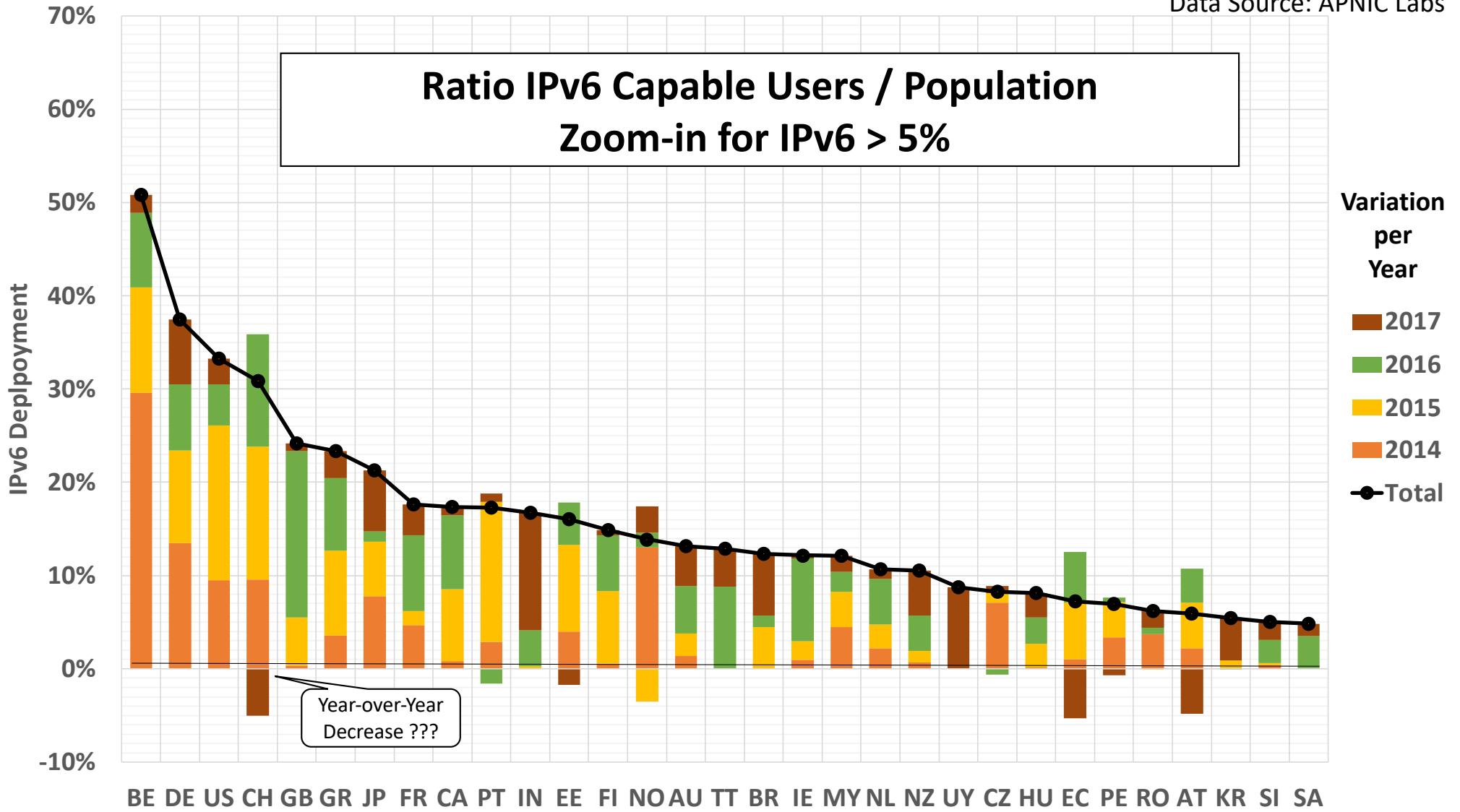


Ratio IPv6 Capable Users / IPv4 Users



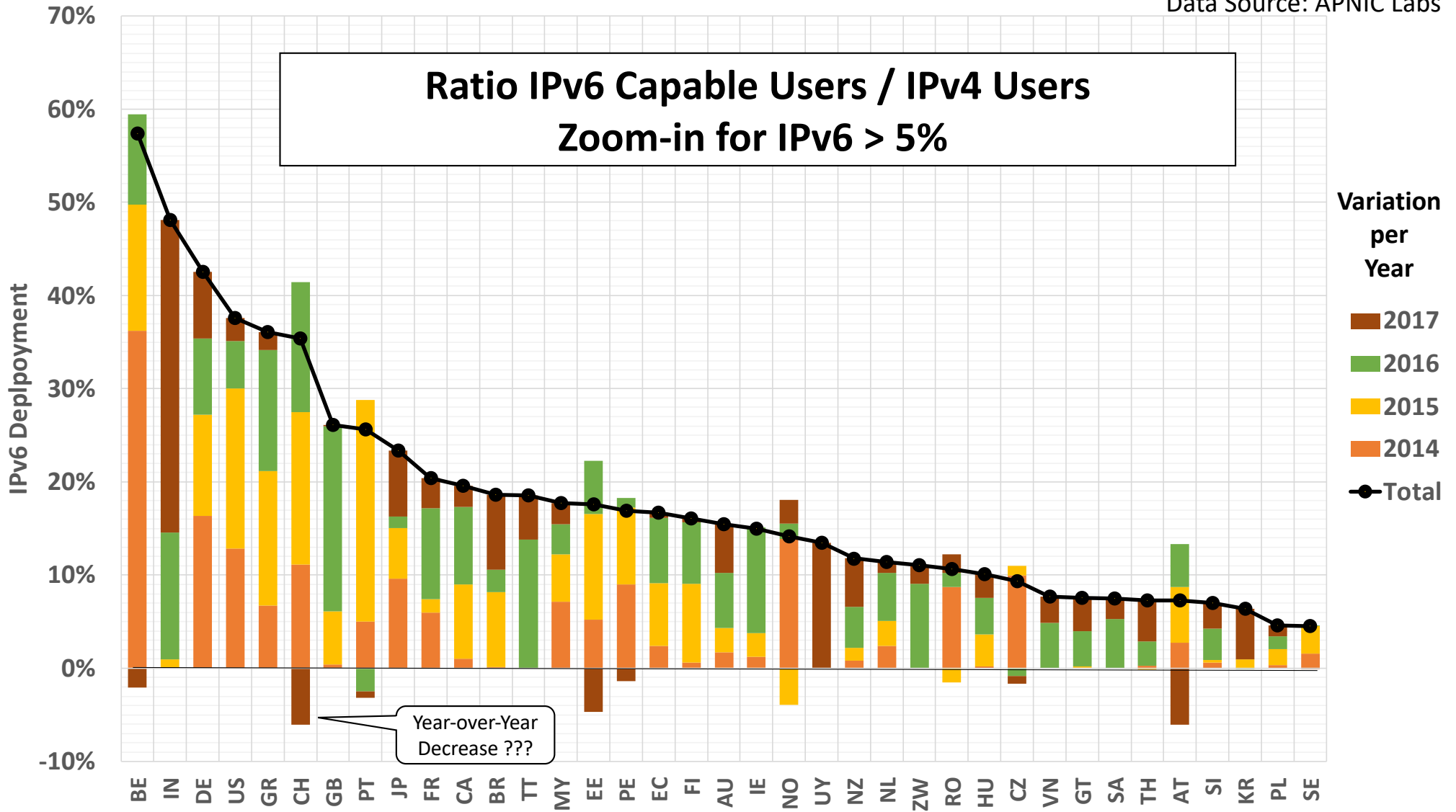
Ratio IPv6 Capable Users / Population

Zoom-in for IPv6 > 5%



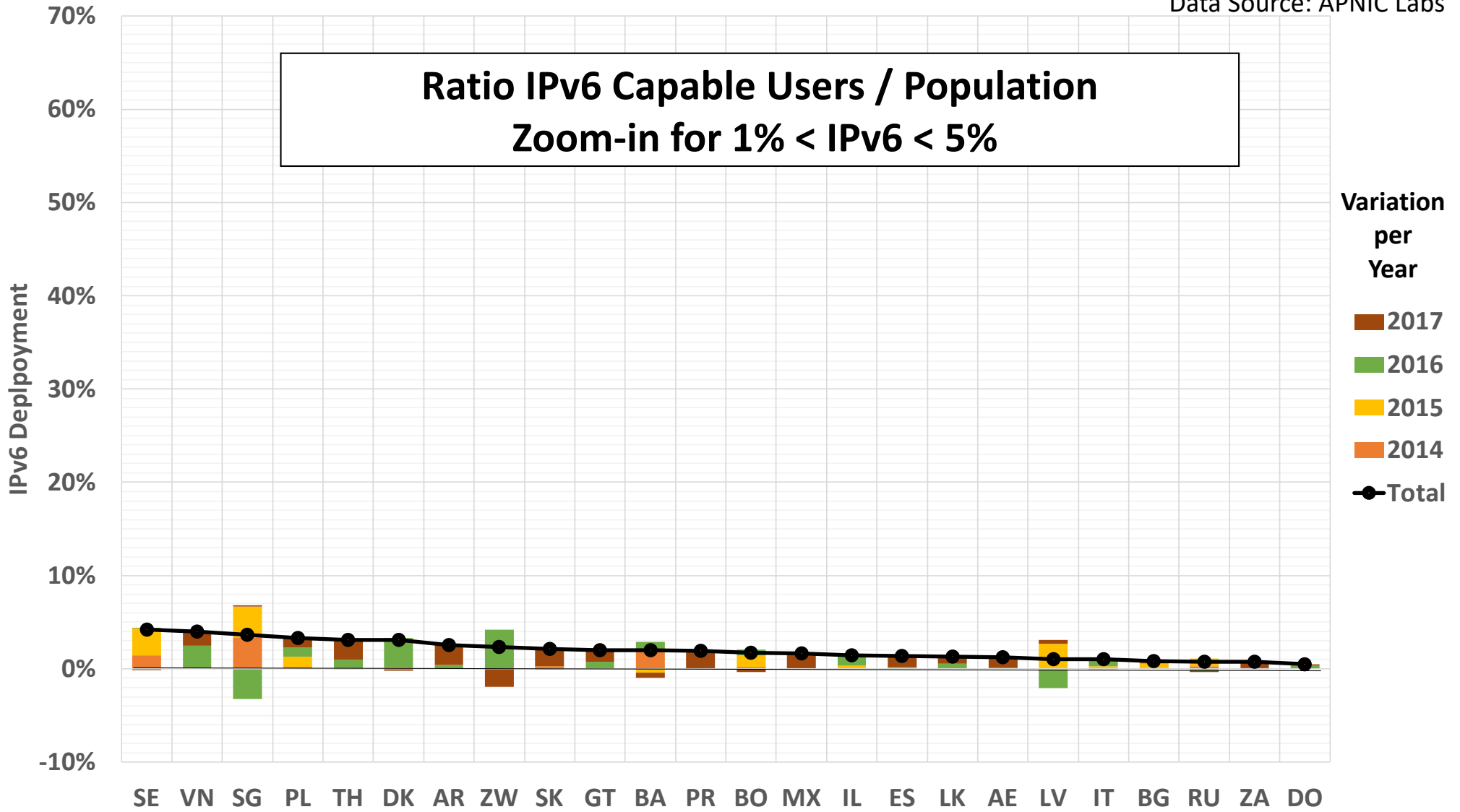
Ratio IPv6 Capable Users / IPv4 Users

Zoom-in for IPv6 > 5%

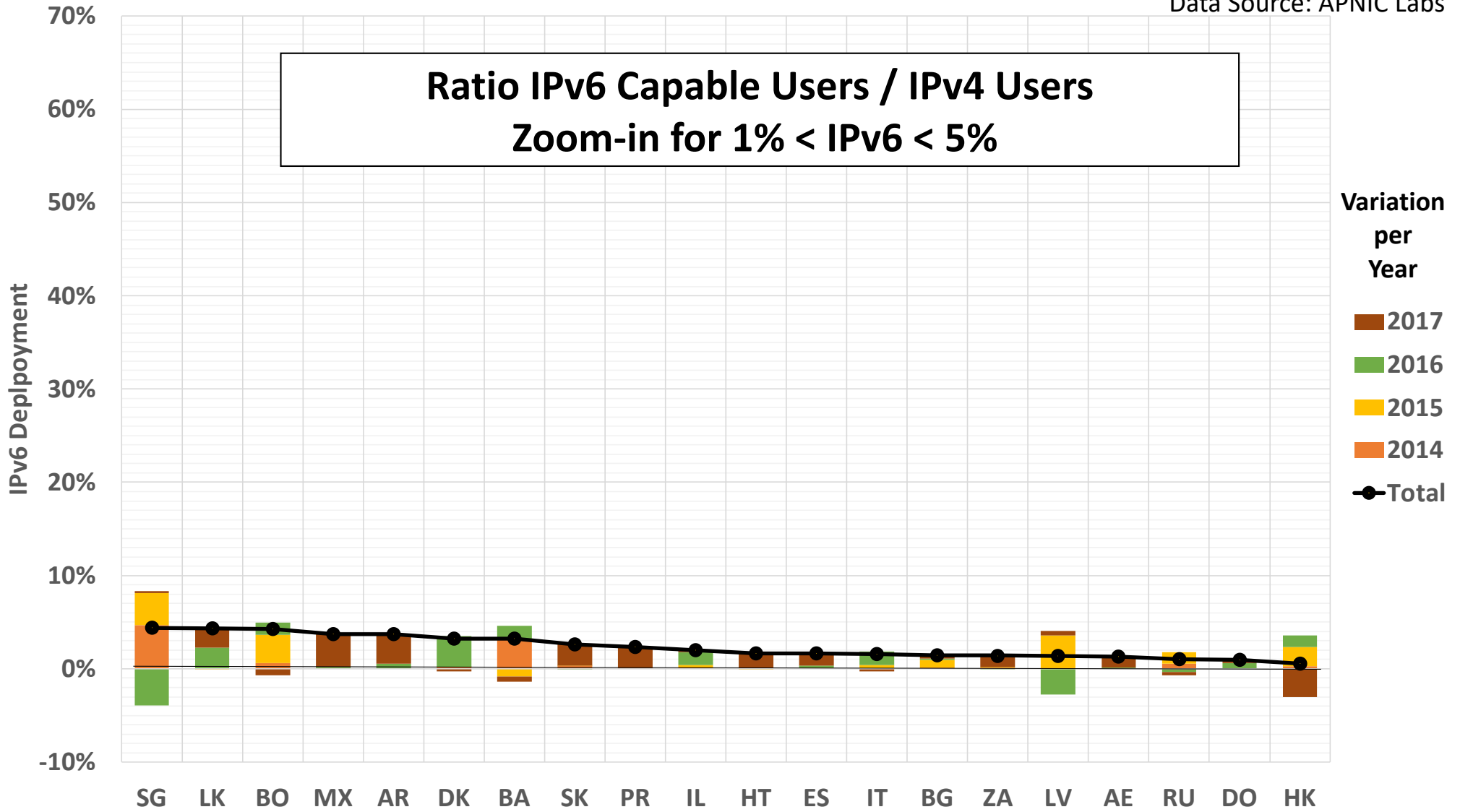


Ratio IPv6 Capable Users / Population

Zoom-in for 1% < IPv6 < 5%



Ratio IPv6 Capable Users / IPv4 Users
Zoom-in for 1% < IPv6 < 5%



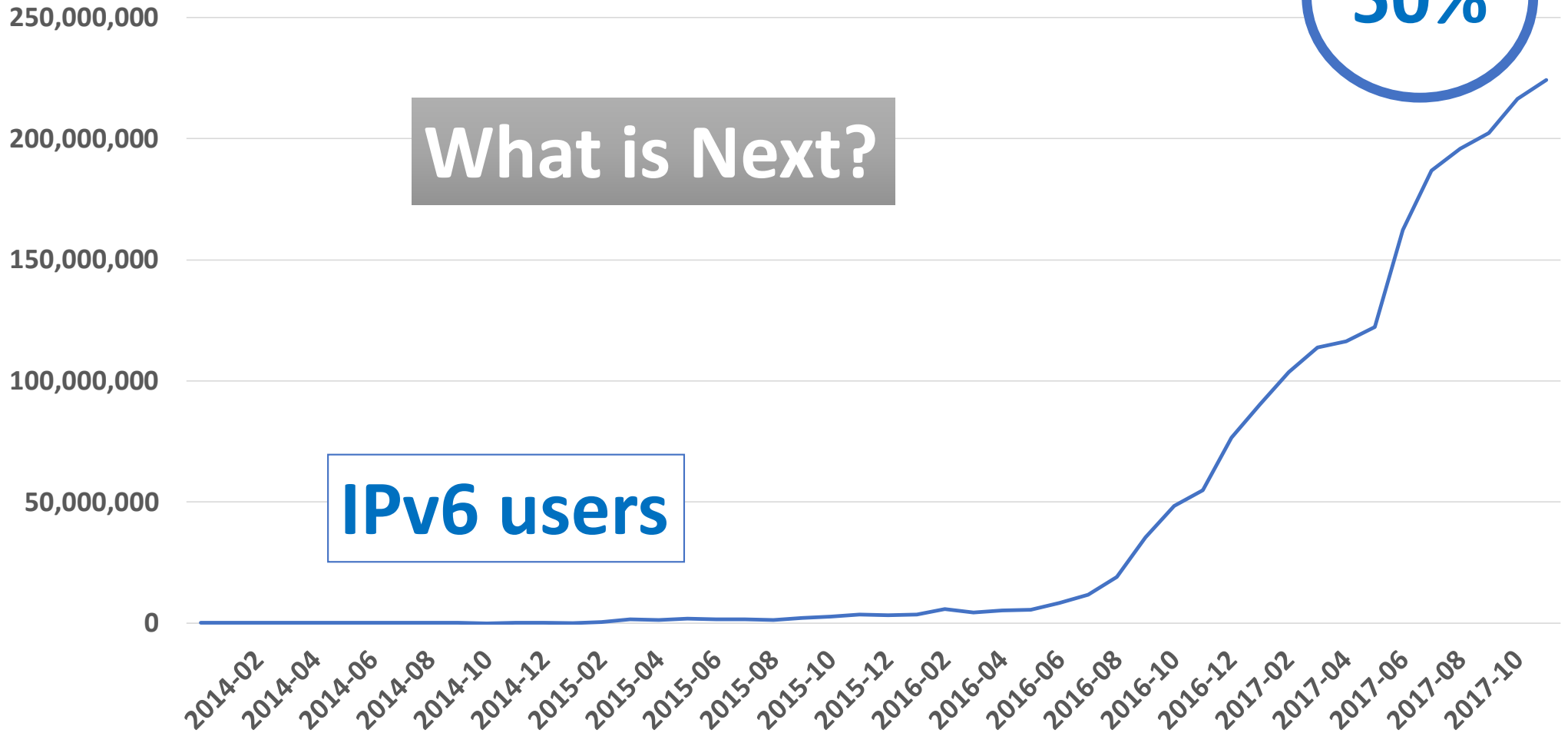
Country Case Studies...

IN: 466 Million Users

50%

What is Next?

IPv6 users



KR: 44 Million Users

8.5%

3,000,000

2,500,000

2,000,000

1,500,000

1,000,000

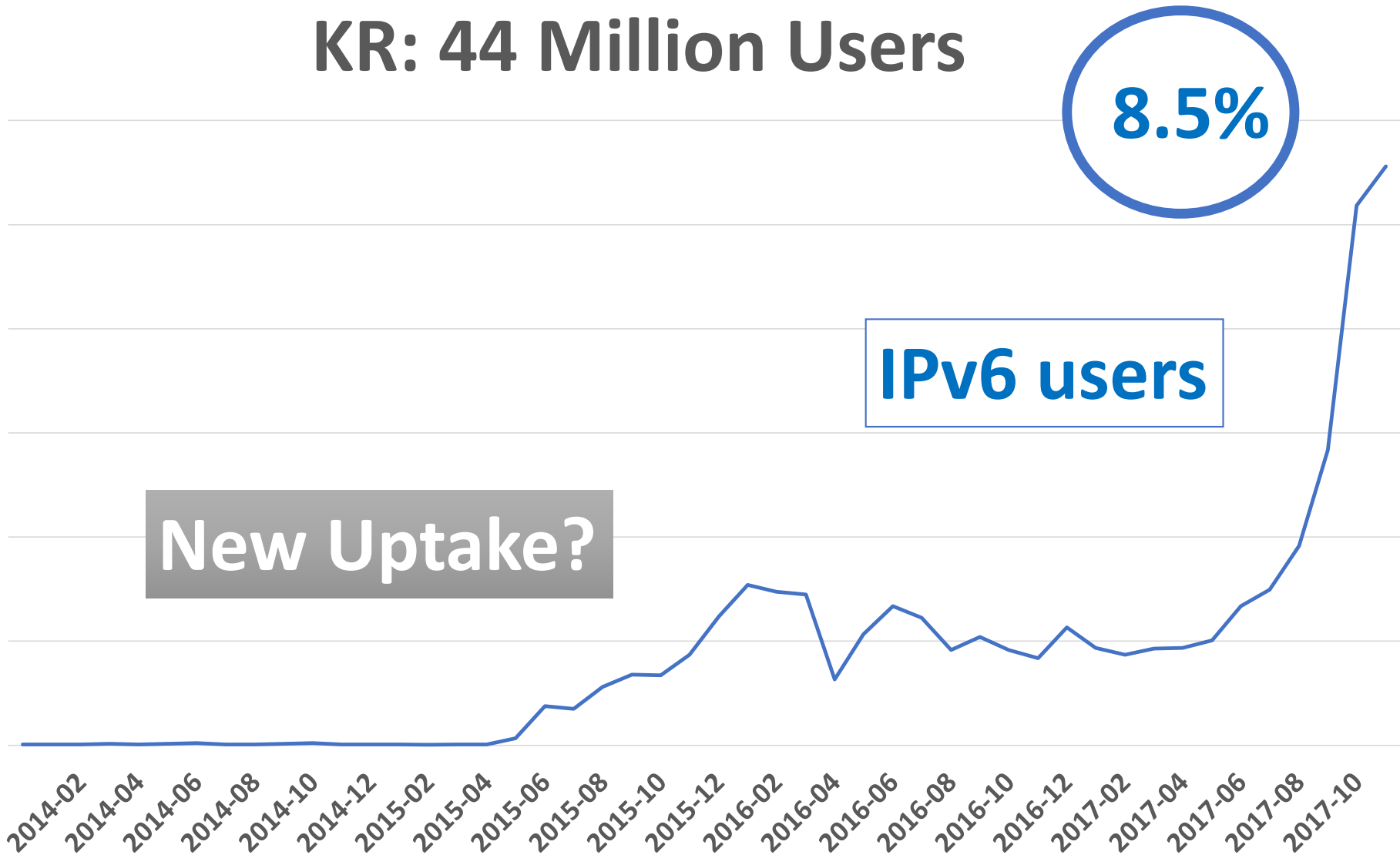
500,000

0

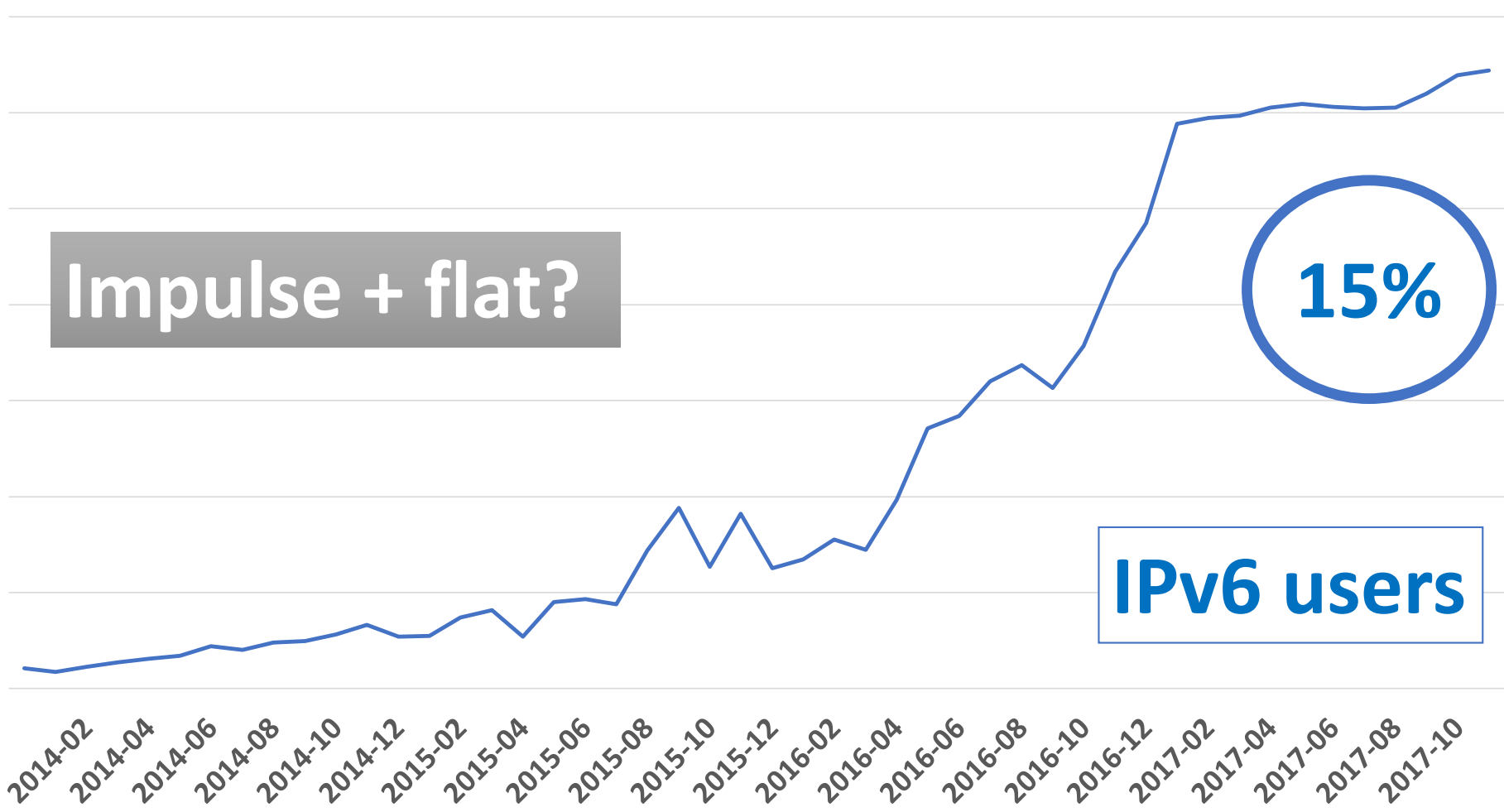
IPv6 users

New Uptake?

2014-02 2014-04 2014-06 2014-08 2014-10 2014-12 2015-02 2015-04 2015-06 2015-08 2015-10 2015-12 2016-02 2016-04 2016-06 2016-08 2016-10 2016-12 2017-02 2017-04 2017-06 2017-08 2017-10



AU: 21 Million Users



Impulse + flat?

15%

IPv6 users

MY: 22 Million Users

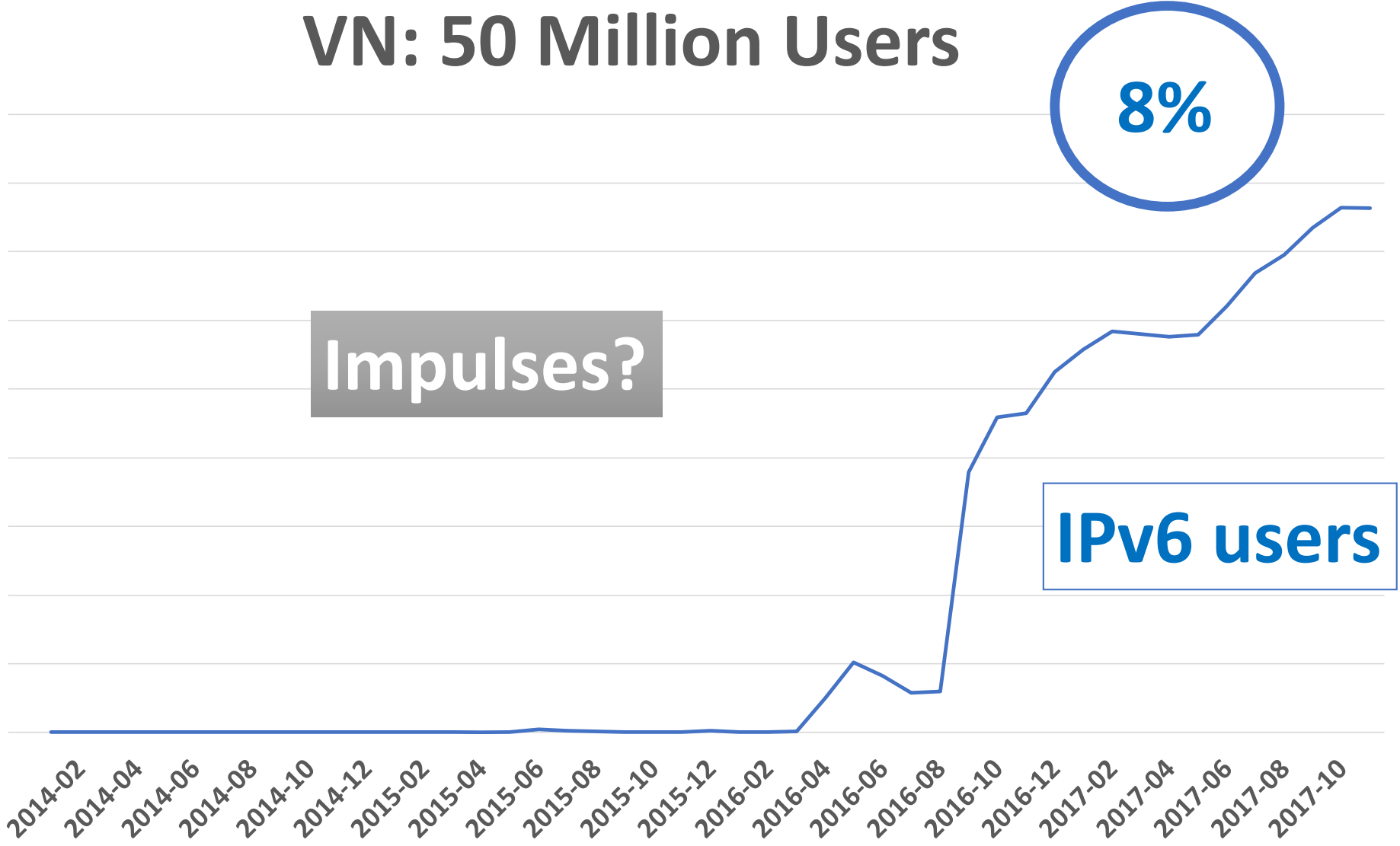


17%

IPv6 users

Steady?

VN: 50 Million Users



JP: 116 Million Users

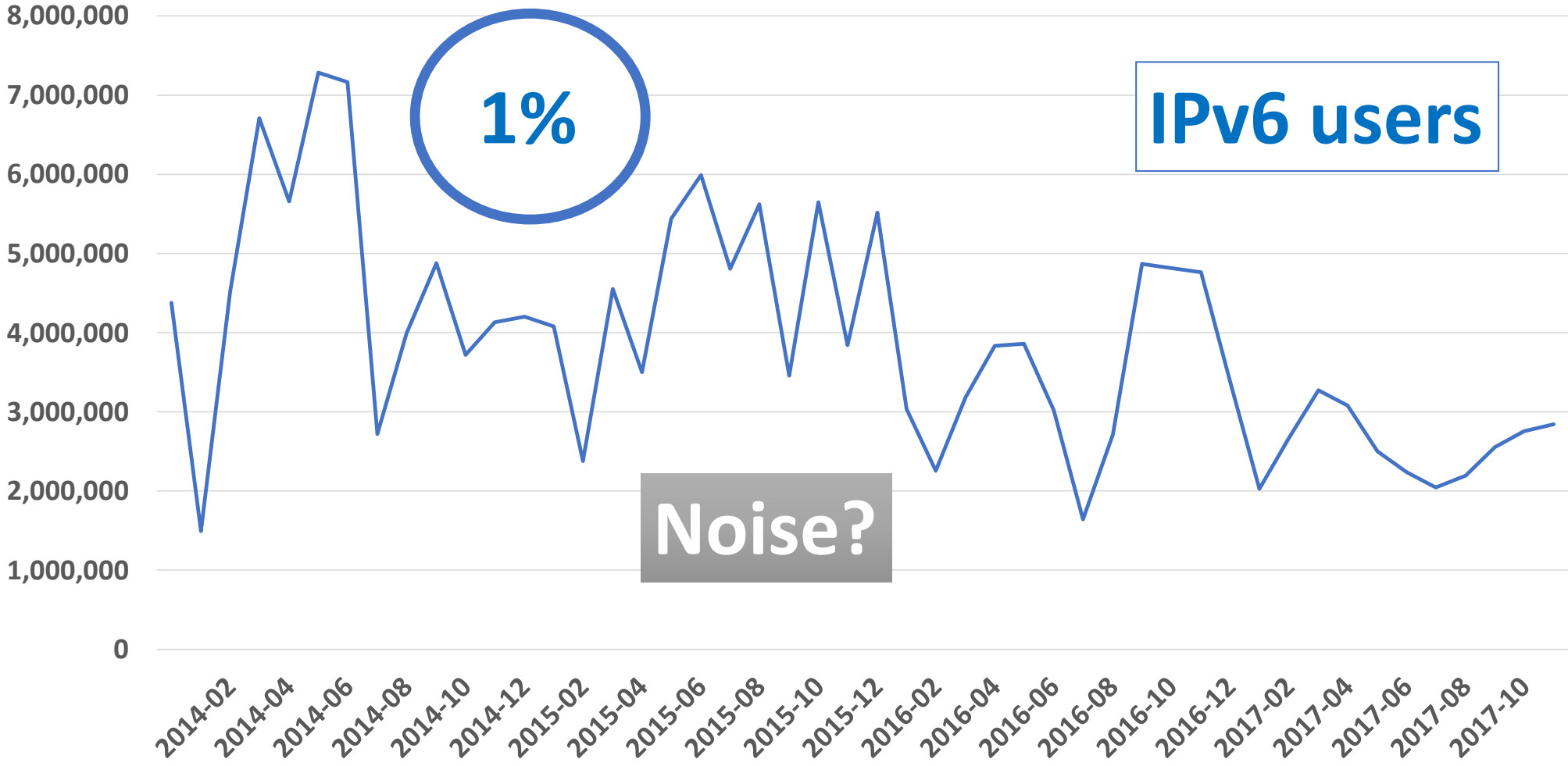


Steady?

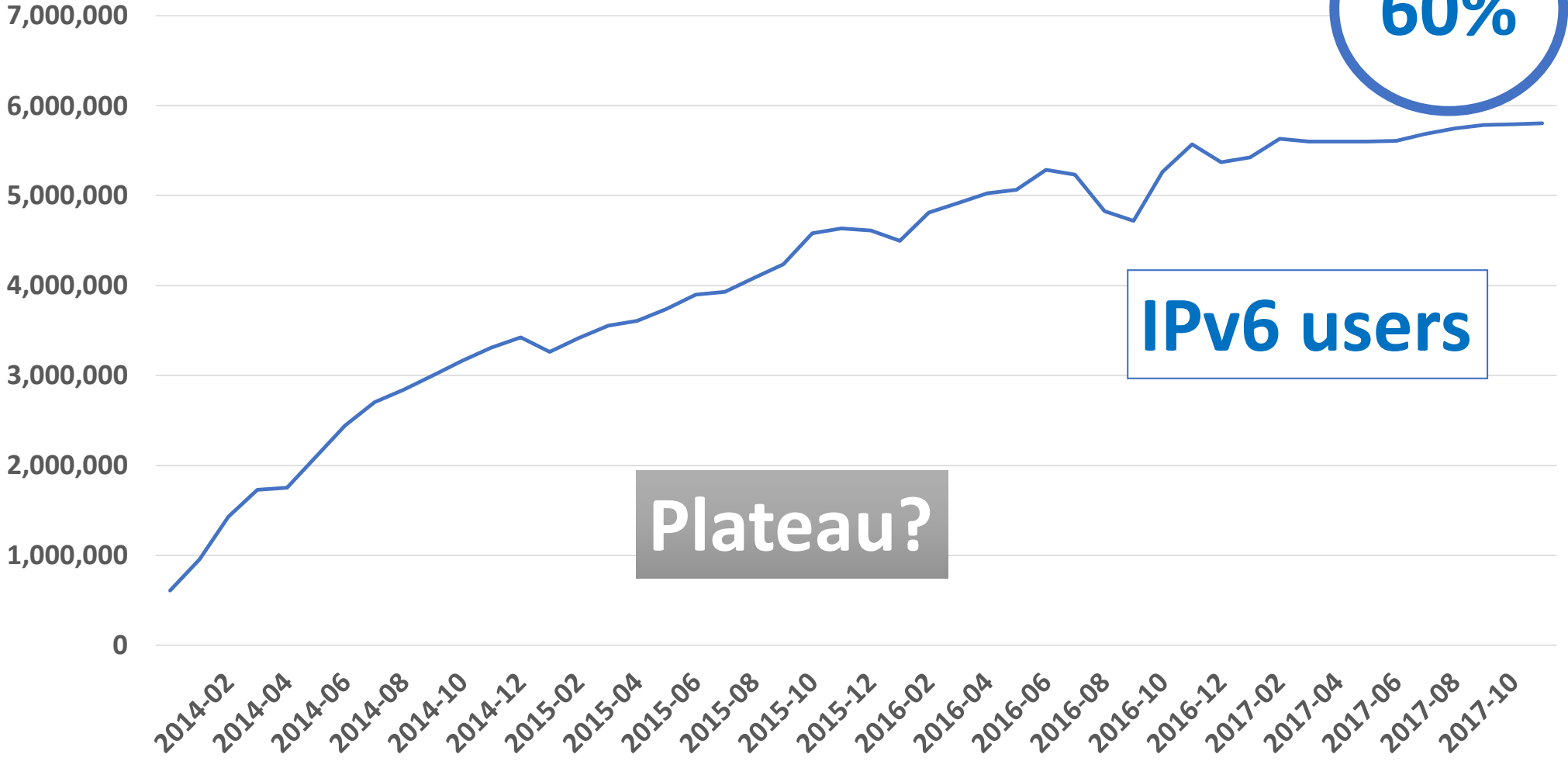
IPv6 users

22%

CN: 736 Million Users



BE: 10 Million Users



CH: 7.4 Million Users

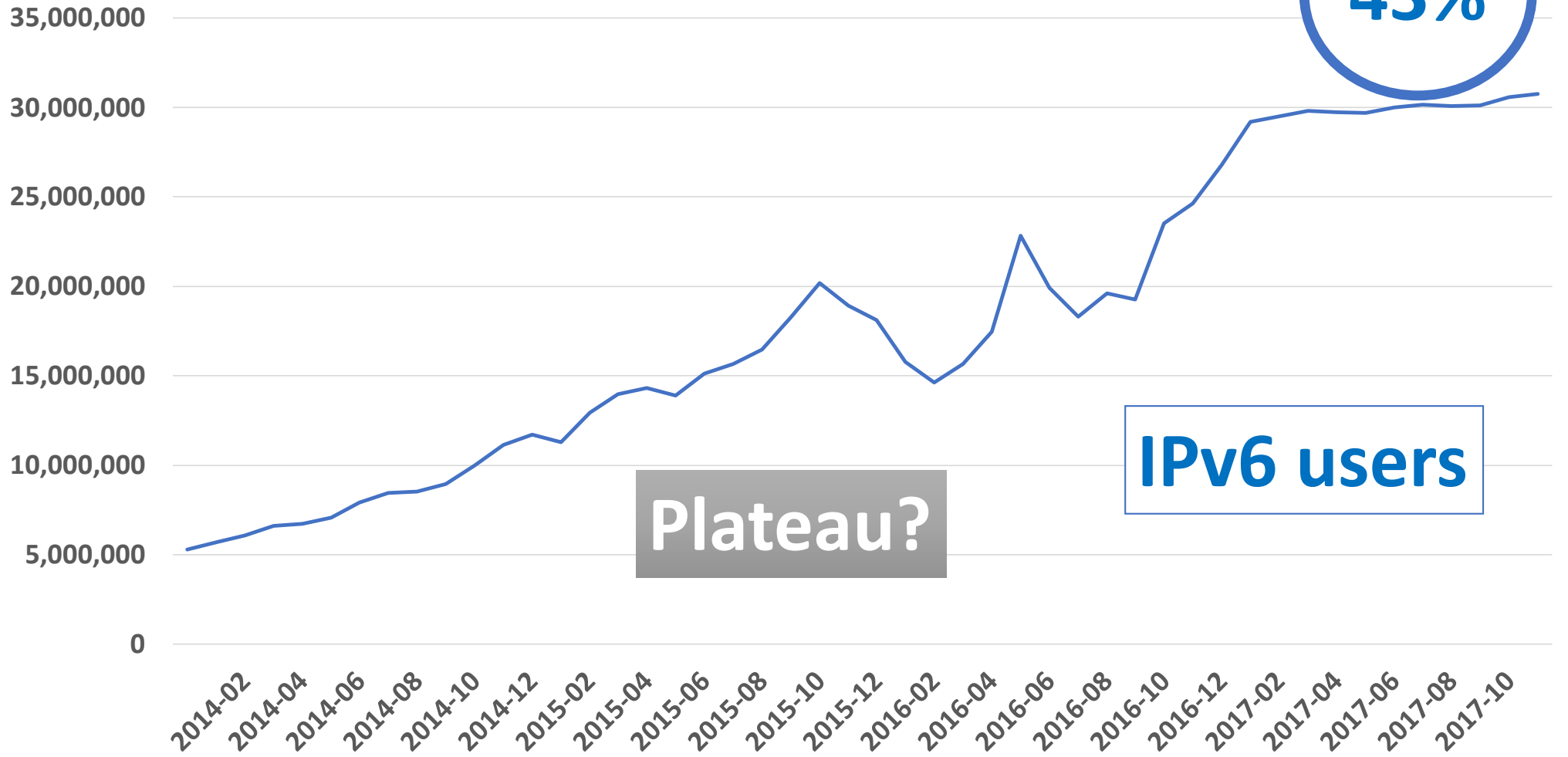


40%

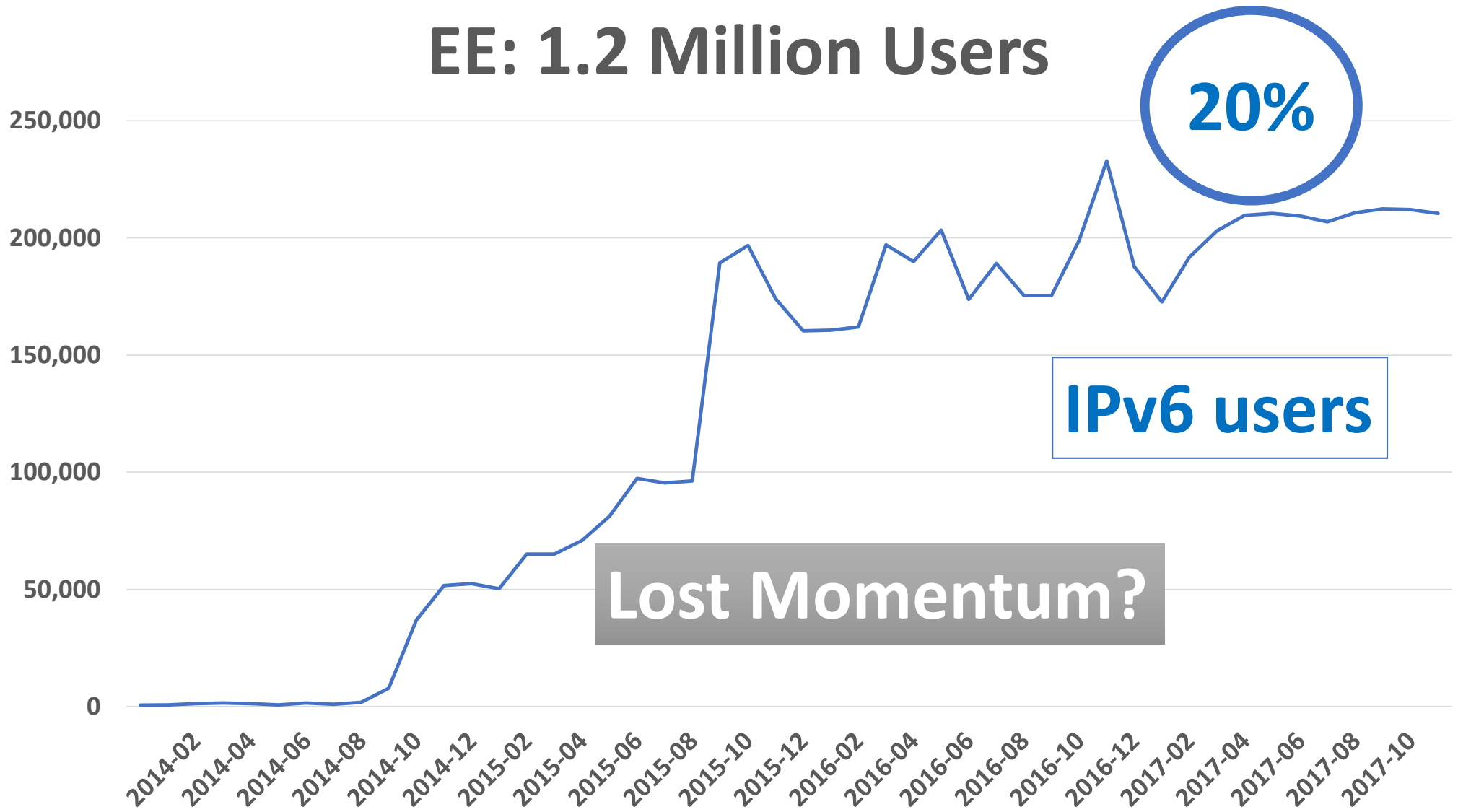
IPv6 users

Lost Momentum?

DE: 72 Million Users



EE: 1.2 Million Users

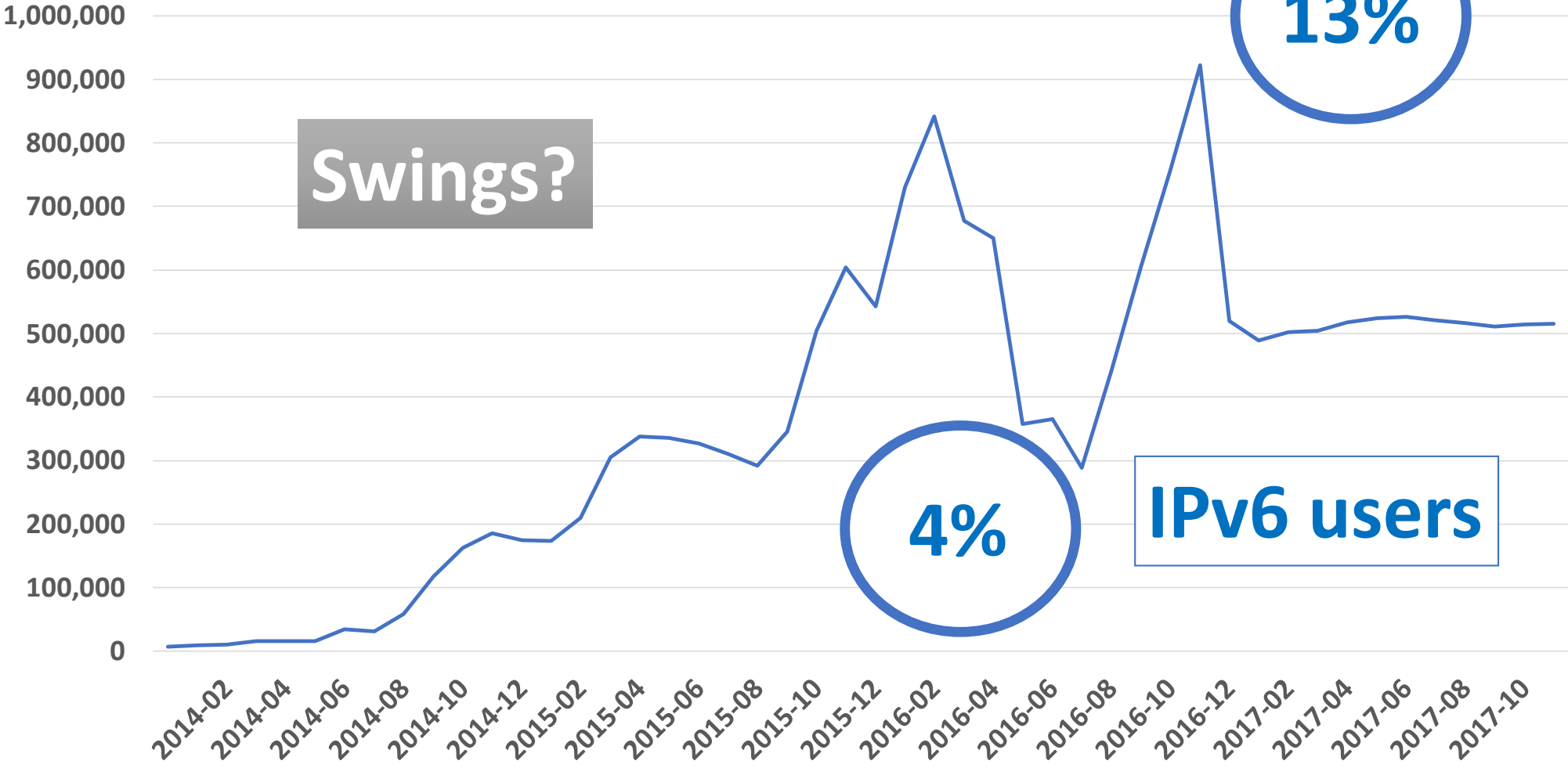


20%

IPv6 users

Lost Momentum?

AT: 7 Million Users

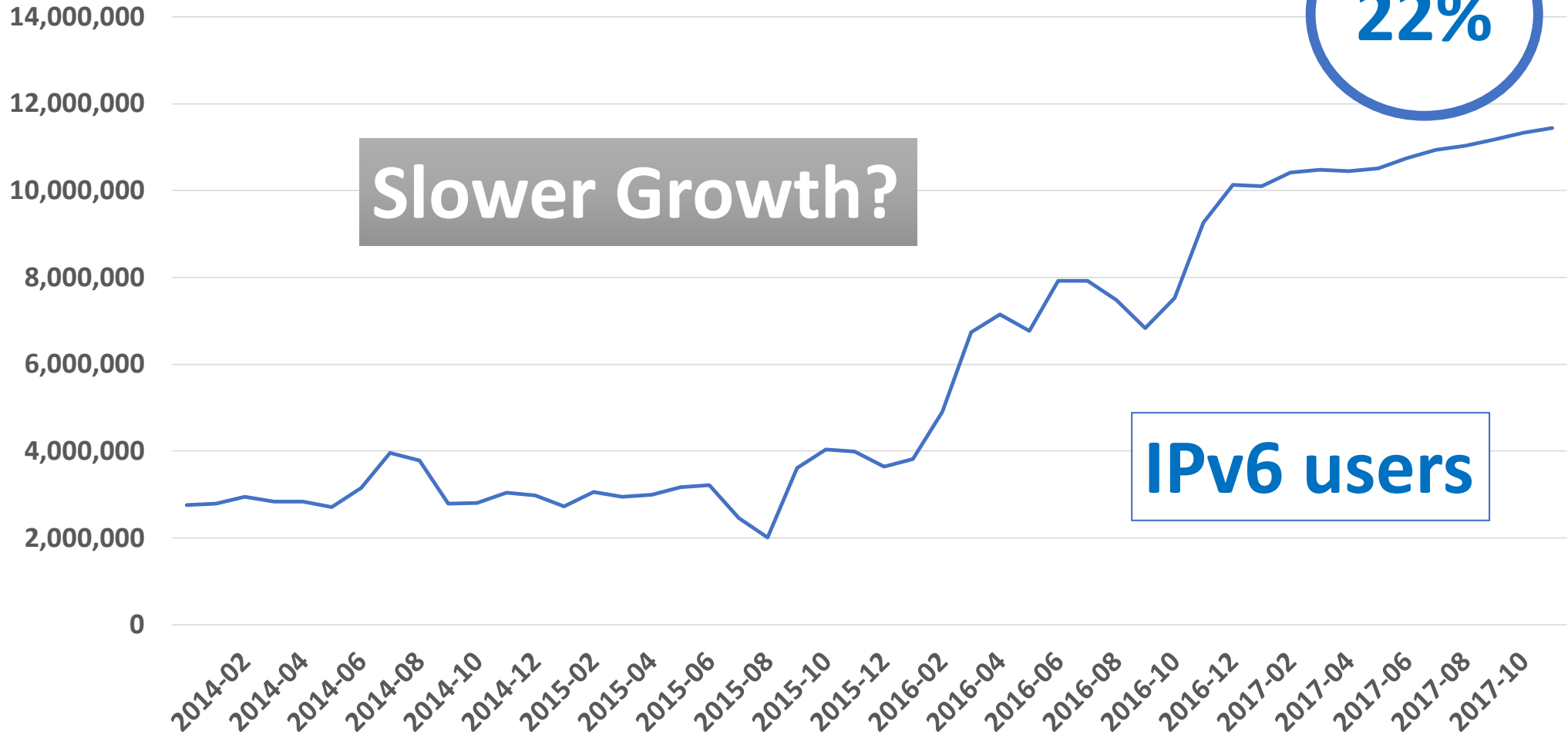


FR: 56 Million Users

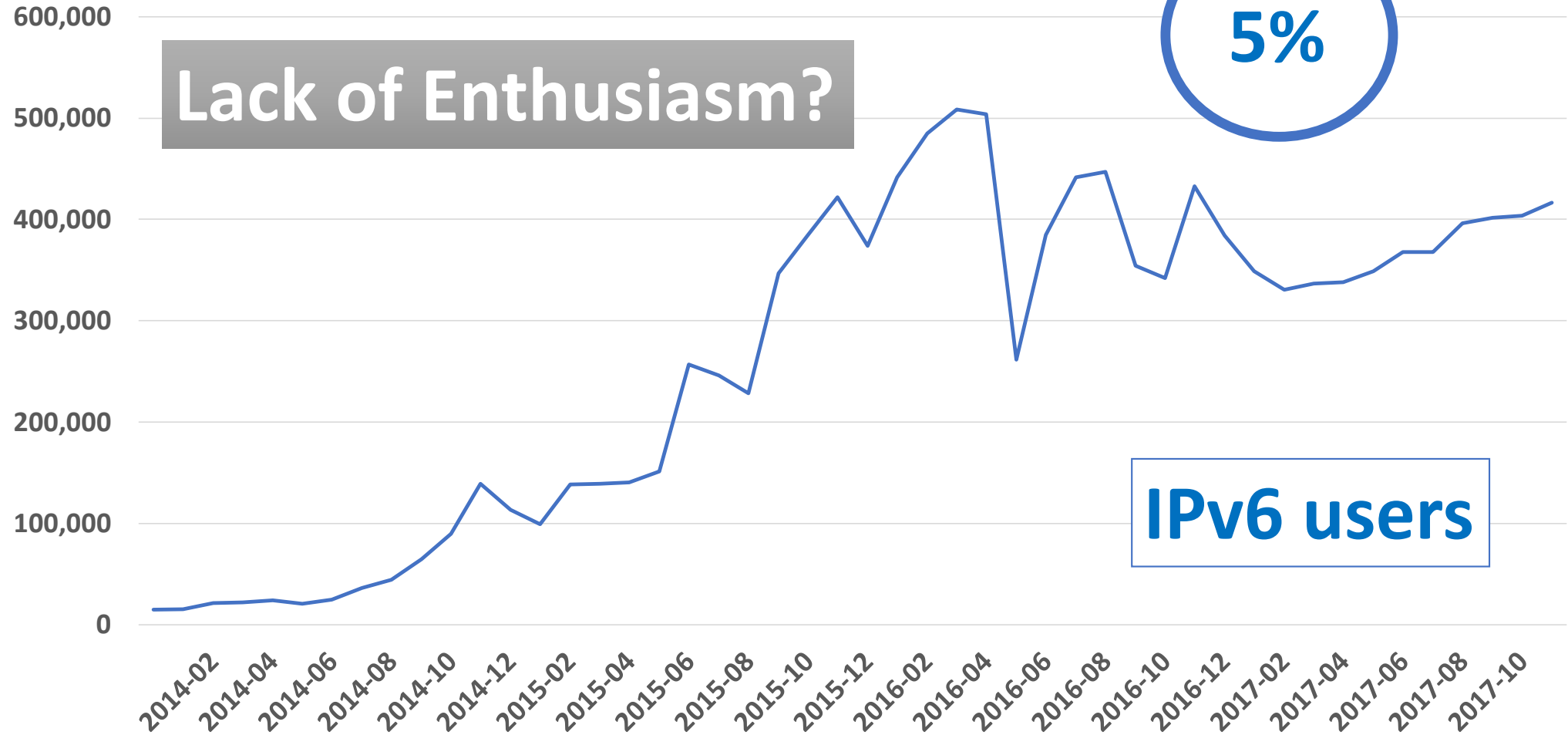
22%

Slower Growth?

IPv6 users



SE: 9.2 Million Users

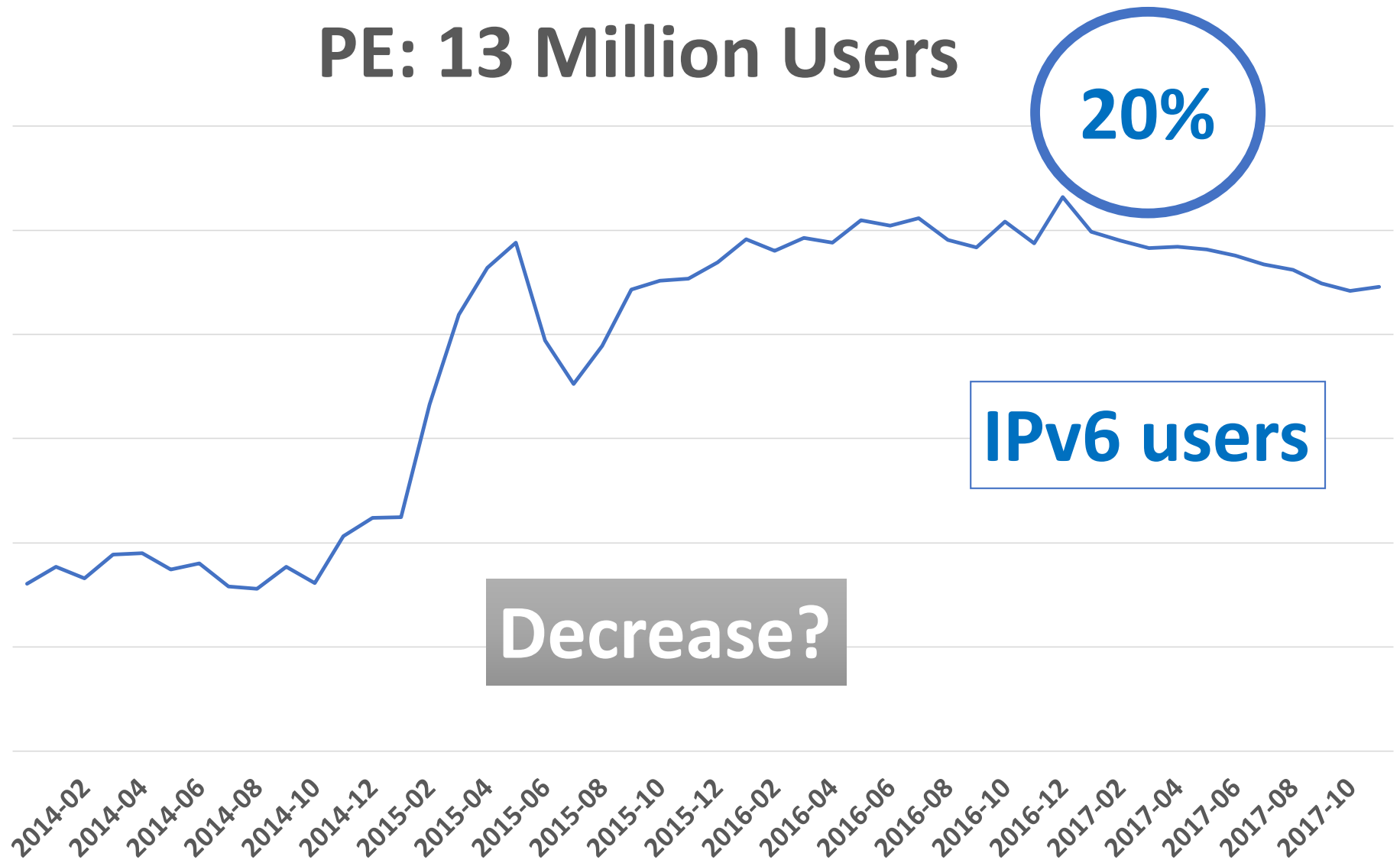


Lack of Enthusiasm?

5%

IPv6 users

PE: 13 Million Users



20%

IPv6 users

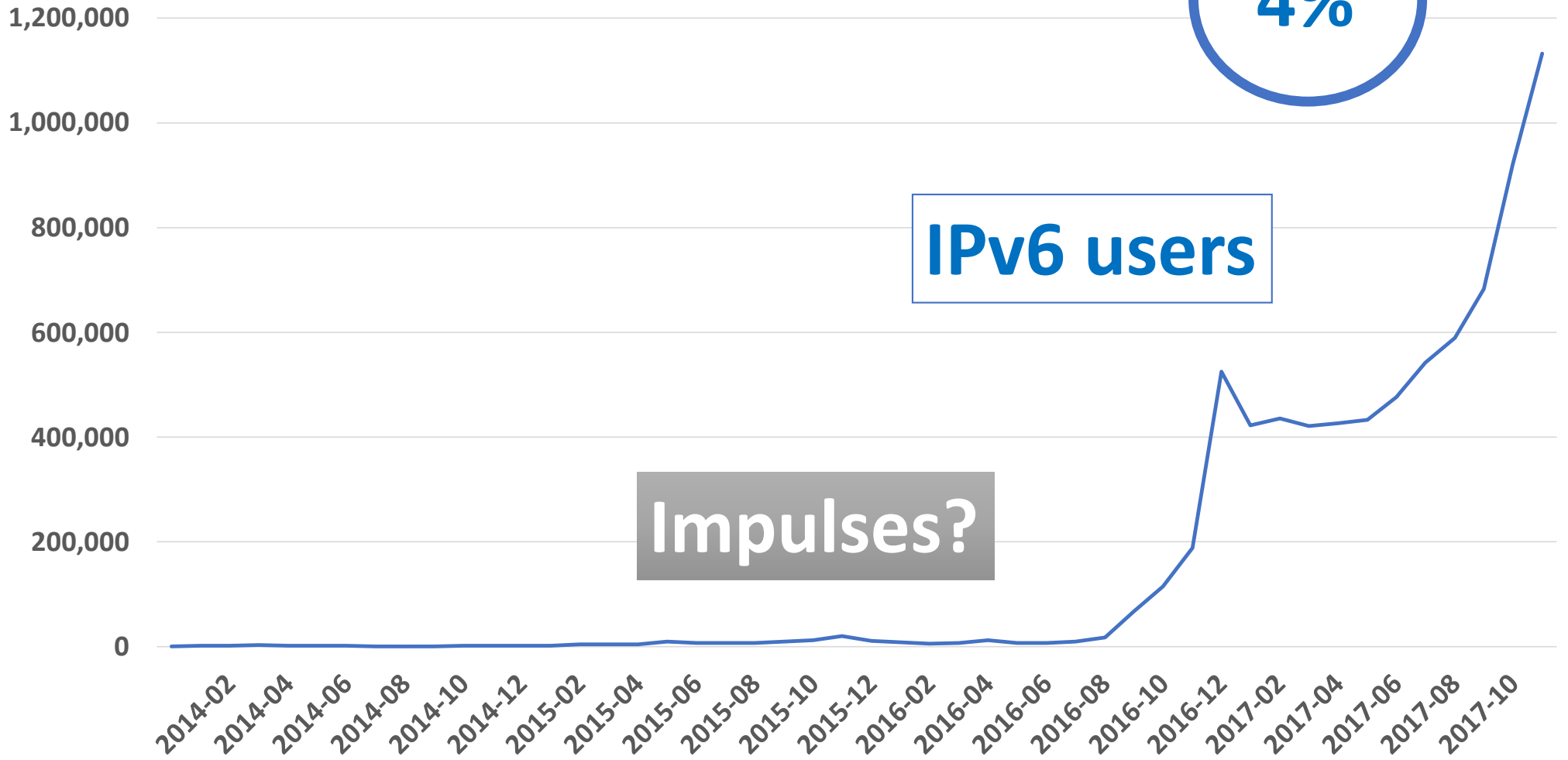
Decrease?

AR: 31 Million Users

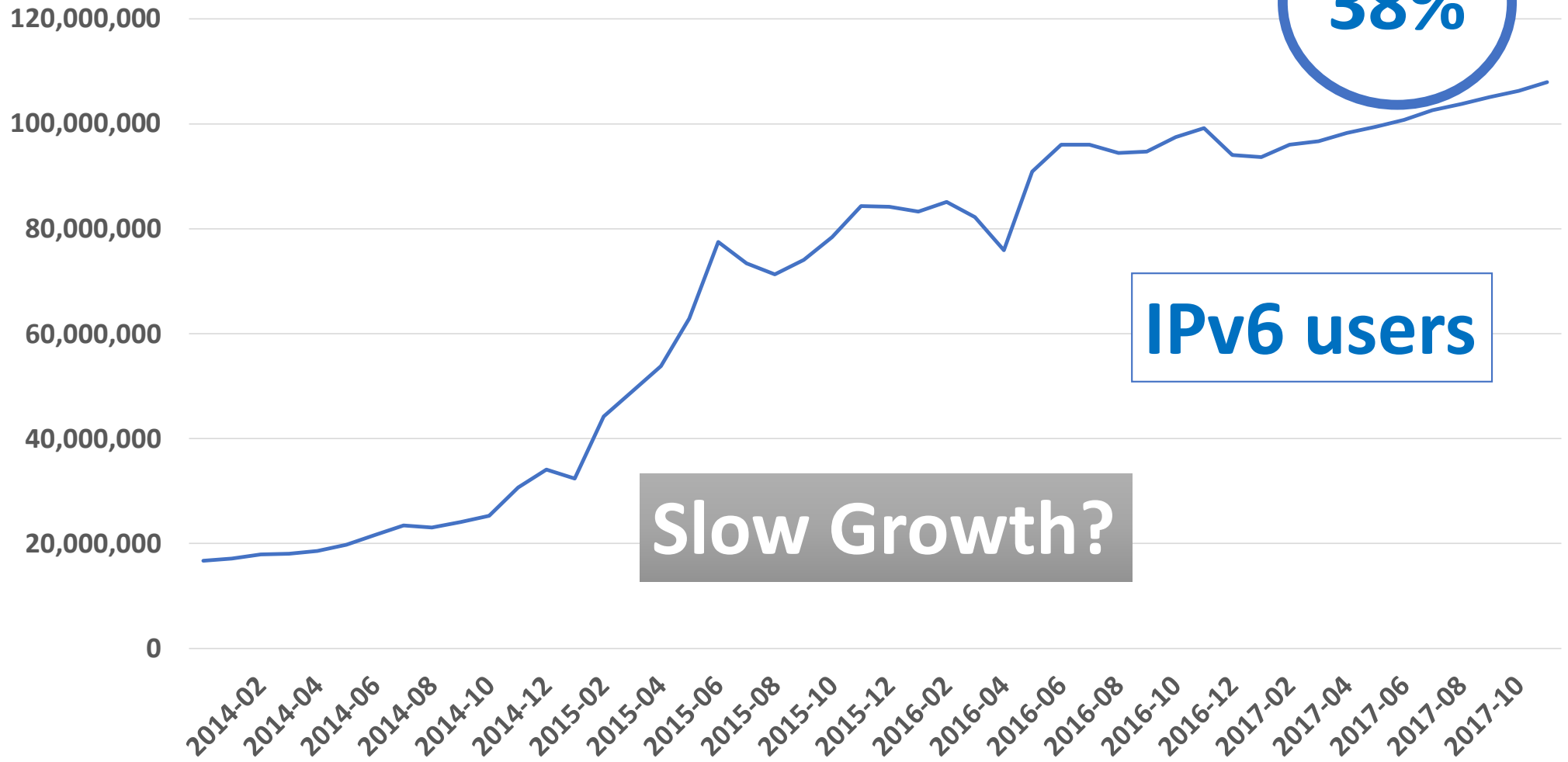
4%

IPv6 users

Impulses?



US: 287 Million Users



38%

IPv6 users

Slow Growth?

Observations

- Until IPv6 reached XX penetration in YY countries, IPv4 will remain relevant.

(XX and YY may vary depending on business views)

- Until then, IPv6 is NOT a general replacement for IPv4.
- The IPv4 address market might be in here for the long run.

Further Research...

- Why is IPv6 taking off in some countries but not in others of apparently similar economic situation?
- Are there patterns/lessons we can discern in countries that are ahead of the curve?
- Why do we see those plateaus?

Engage with ICANN

Thank You and Questions

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