





"Hey, where's my fiber?"

Simon Kissel, CEO / Head of Innovations, Viprinet





ABOUT MYSELF



Simon Kissel

CEO / Head of Innovations, Viprinet

- Nerd & Innovator
- Invented Multi-WAN Bonding in 2005
- Founded Viprinet in 2006
- Managing a team of 50, but preferring computers

ABOUT VIPRINET









- Founded 2006, market entry 2008
- Headquarter in near Frankfurt / Germany,
 Office in Sunnyvale, CA, USA
- 50 employees
- 3,000 customers worldwide

- Manufacturer of innovative network components
- Specialist for line-bonding WAN connection hardware and SD-WAN solutions
- Holds US and EU patent on WAN bonding

PEOPLE'S LIFES DEPEND ON US.









- Stationary and mobile mission-critical SDWAN and unbreakable Broadband
- We are doing this for 10 years now
- We have actually working technology

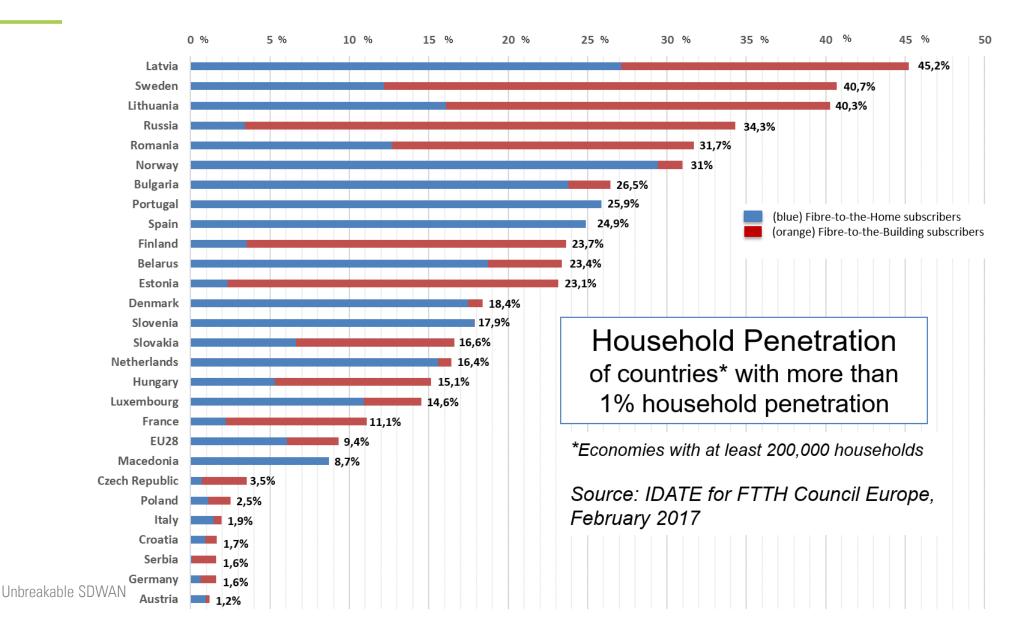
- Deployed in the most mission-critical scenarios all across the world
- Developed, supported from and produced in Germany
- The foundation of any SD WAN solution should be technology that actually works.

WHERE IS MY FIBER?





WHERE IS MY FIBER?



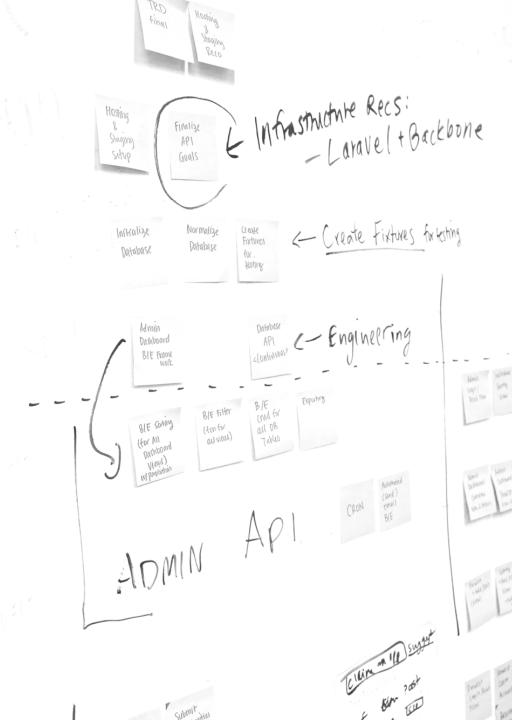


GERMANY: 1,6%



CONCLUSIONS

- 1. If you want fiber, go to Latvia or Sweden
- 2. Yes, it is too cold there
- 3. Politicians are betting on 5G instead
- 4. But...







5G IS A LIE!



WE NEED FIBER, BUT...



BUSINESS NEEDS STABLE BROADBAND. TODAY.



WHERE IS THE PROBLEM?

- 2013: M1 fined record S\$1.5M for Singapore's worst network outage
- 2014: SingTel fined \$4.8m for network outage
- 2017: Three fined £1.9m for emergency call service failure
- 2017: BT fined £42m for providing delayed broadband installations

Who's next?



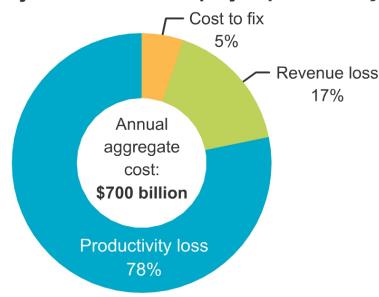


WHERE IS THE PROBLEM?

- IHS reports that network interruptions are the biggest factor contributing to downtime
- Equipment failures contribute to close to 40% of all reported downtime
- Service provider problems make up nearly 25% of downtime

2016 Cost of downtime: \$700 Billion

IT downtime costs North American businesses \$700 billion annually, mostly due to loss of employee productivity



© IHS, IHS Infonetics The Cost of Server, Application, and Network Downtime: Annual North American Enterprise Survey and Calculator; 2016



FIBER TO THE AMBULANCE?



WE NEED TO BRIDGE



HOW CAN WE BRIDGE THE GAP?



- 1. Use what we have today
- 2. Use EVERYTHING we have today
- 3. Redundant access methods (DOCSIS, DSL, LTE, Sat...)
- For Mobile single LTE is not stable enough. Use Multiple.
- 5. Educate politicians that Fiber is needed





