

➤ Geim – öryggi & tengingar?

Stafræn röskun – Er komið að networking ?

Arnar S. Gunnarsson - CISO



Núverandi ógnir



SUBSEA CABLES

Cable near Taiwan cut

The Chinese-owned Shunxing 39 is suspected of cutting part of the Trans-Pacific Express internet cable system off Keelung, Taiwan, by dragging its anchor on January 3.



> Ekkert nýtt

The Global Internet Is Being Attacked by Sharks, Google Confirms

BY WILL OREMUS AUG 15, 2014 • 3:23 PM



Sharks' attraction to undersea fiber-optic cables has been well-documented over the years.

Screenshot / YouTube





Hoppum inn í framtíðina

Við kveðjum 2G og 3G og hoppum inn í framtíðina. Við uppfærum kerfin okkar og mun 5G, LTE-M og NB IoT taka við sem tryggir að öll tæki verða í traustara og betra sambandi. Engar áhyggjur, flestir símar í dag styðja við þessa nýju uppfærslu. Uppfærslan gæti hins vegar haft áhrif ef þú ert að nota eldri takkasíma, krakkaúr, skynjara eða mæla.



Bless 3G!

Hvað nákvæmlega er að fara að gerast?



Slökkt á 2G og 3G

Þú þarft ekki að örvænta því 4G sér um að símtölin skili sér! Við erum byrjuð að slökkva á ákveðnum svæðum í skrefum. Nú þegar hefur verið slökkt á 2G og við munum slökkva á 3G í lok árs 2025.



Öll fjarskiptafélög taka þátt!

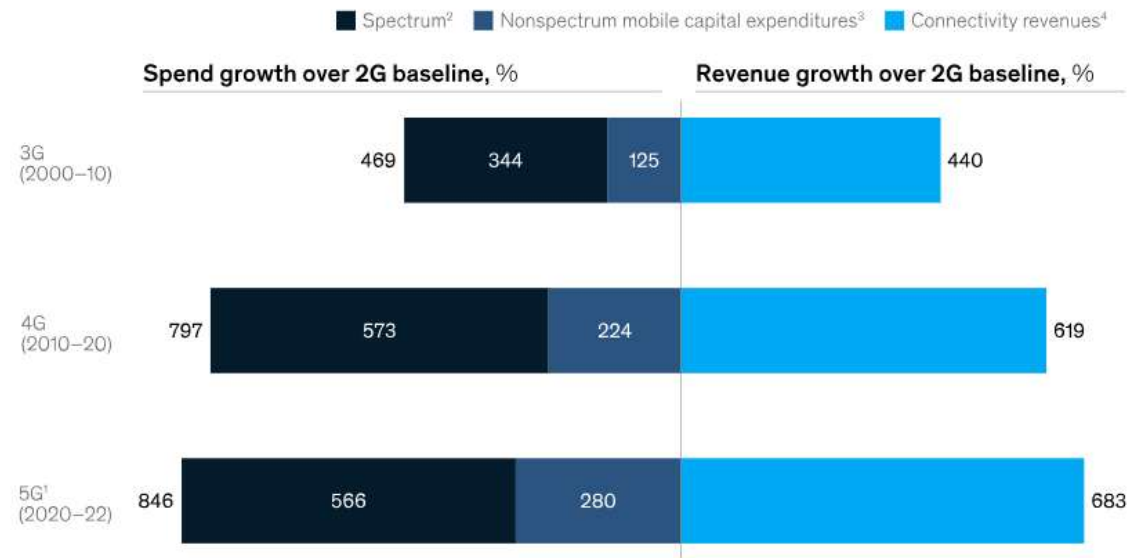
Þegar við slökkvum á 2G og 3G þá erum við að fylgja þróun á heimsvísu sem miðar að því að fasa út úrelta tækni og halda áfram að byggja ofan á eitthvað nýtt og spennandi! Öll fjarskiptafélög á Íslandi taka þátt í þessu verkefni!



➤ Nóg eftir með 5G

- "We estimate that in the 4G era, MNO **spend has increased by a factor of eight**, while revenues have only increased by a factor of six compared to the 2G baseline. For 5G, spend has increased even further as networks are upgraded, densified and increasingly fiberized, while spectrum auctions have also become more expensive. However, significant **net new revenue pools based on 5G have yet to materialise at scale**"
 - "Tomas Lajous, senior partner at McKinsey & Co."

For mobile network operators, spending growth has far outpaced revenue growth since the advent of 4G technology.



*Average across 2020-22 vs average across the 2G era (1990-2000).

¹Includes spend from mobile network operators (MNOs) for all spectrum auctions within the period. Auctions that took place prior to the period but auctioned pioneer bands for the successor standard have been reallocated to the latter (eg, 700-megahertz auctions prior to 2010 are accounted for as 4G spectrum spend).

²Includes capital expenditures for towers, equipment, backhaul, and the core.

³Includes all revenues that MNOs were able to generate from their mobile public networks; eg, voice, SMS, data, and revenues from fixed wireless access.

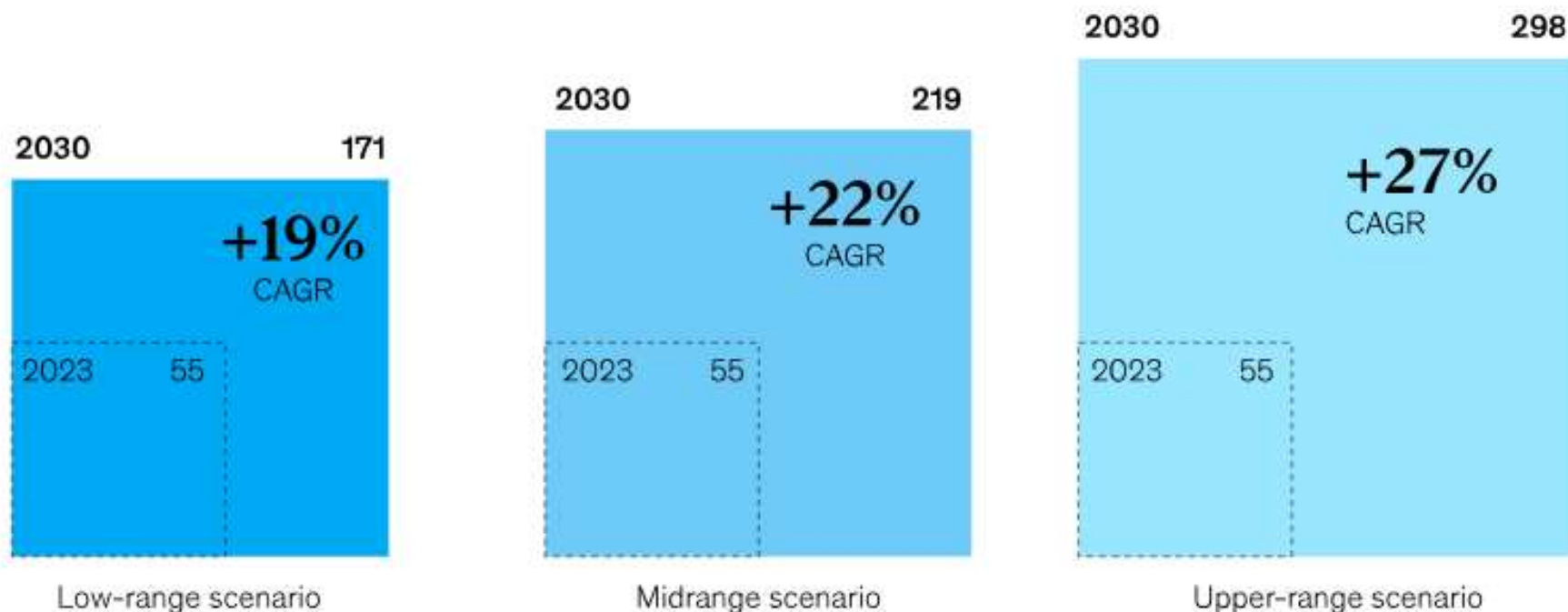
⁴Excludes revenues from adjacent services or connectivity revenues that would require additional capital expenditures (eg, private networks).

McKinsey & Company



Global demand for data center capacity could more than triple by 2030.

Demand for data center capacity,¹ gigawatts



Three scenarios showing the upper-, low-, and midrange estimates of demand, based on analysis of AI adoption trends; growth in shipments of different types of chips (application-specific integrated circuits, graphics processing units, etc) and associated power consumption; and the typical compute, storage, and network needs of AI workloads. Demand is measured by power consumption to reflect the number of servers a facility can house.

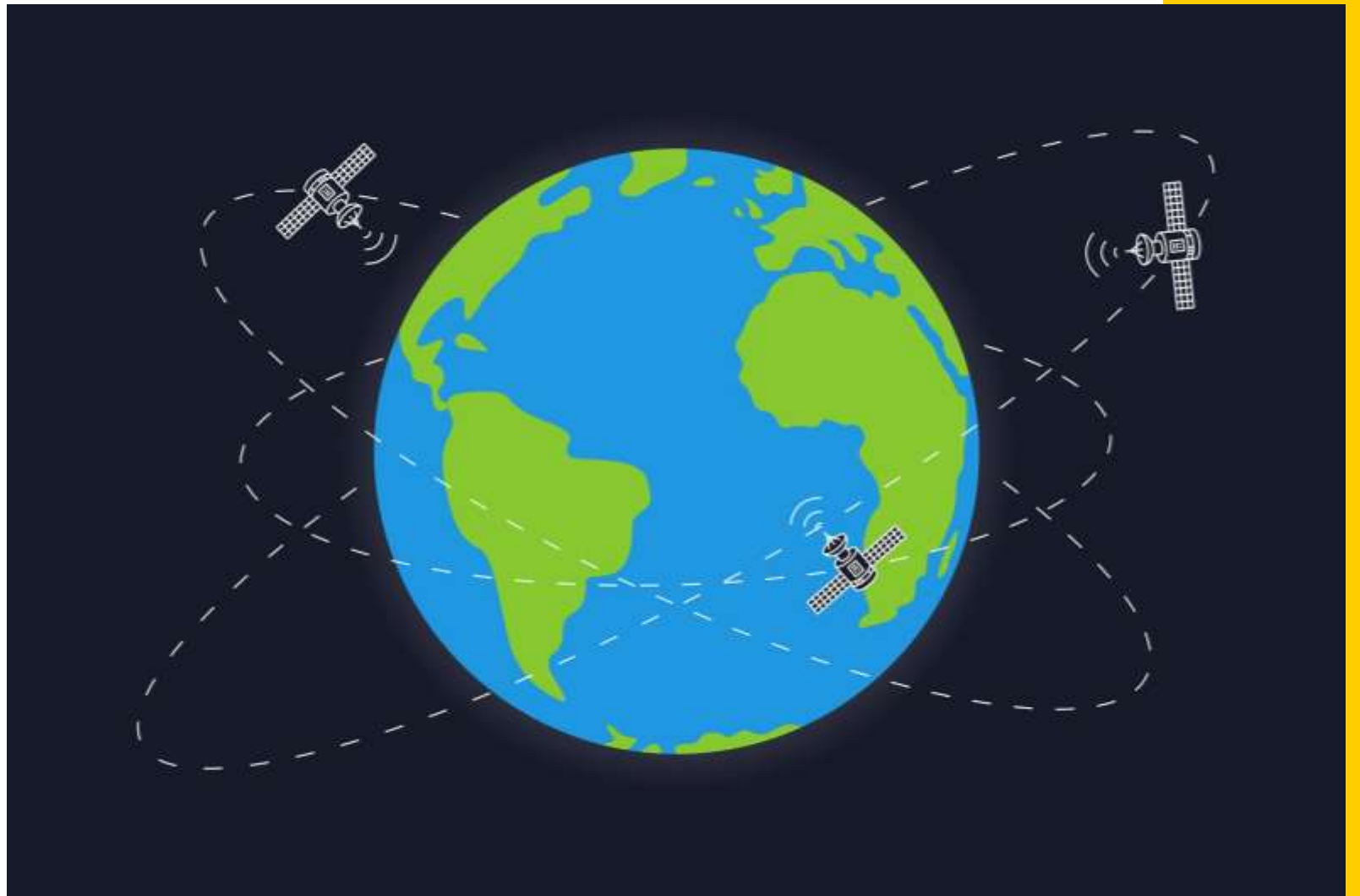
Source: McKinsey Data Center Demand model

Tækni í geimnum

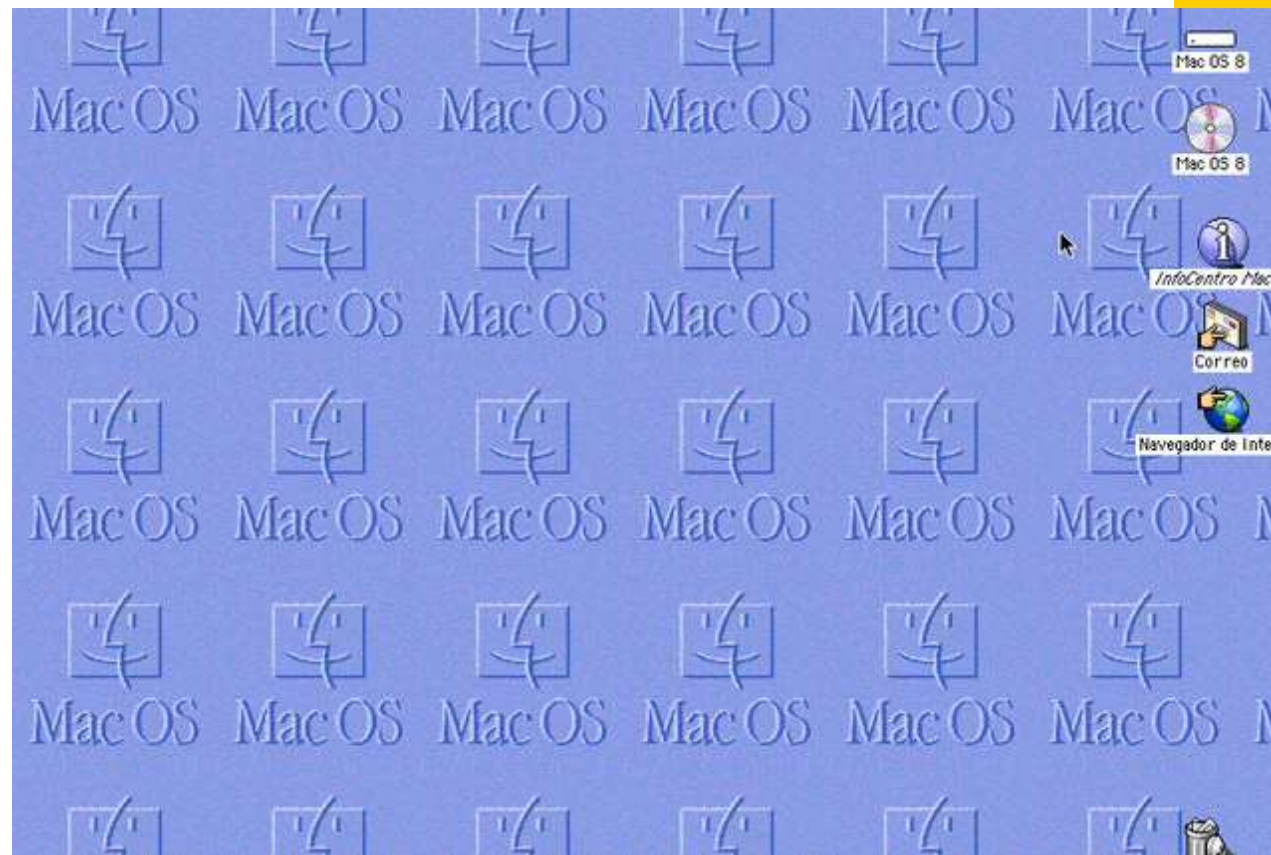


> GPS

- 1993
- 32 virk
- Elsta frá 1997



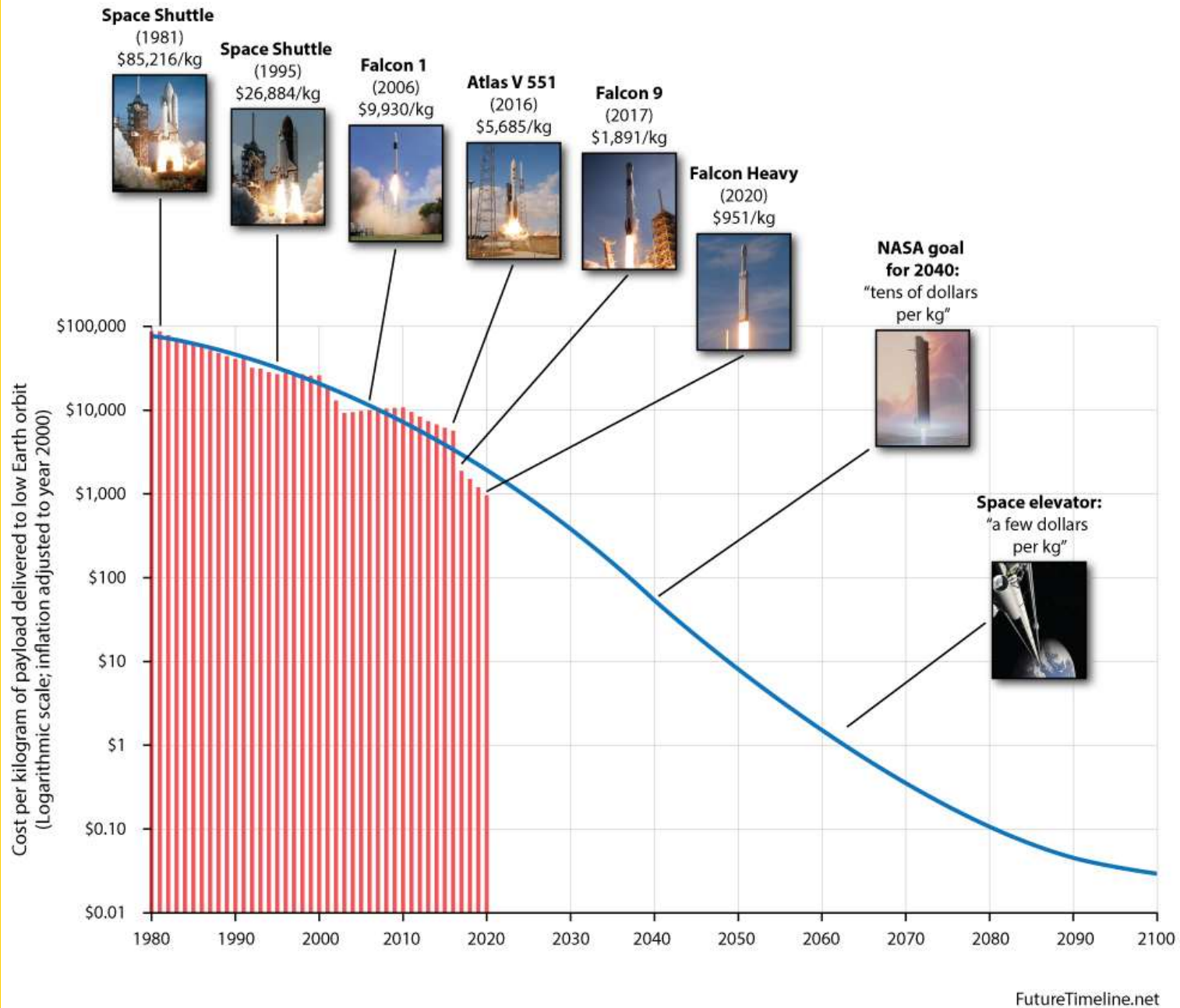
➤ Hvar vorum við 1997 ?



➤ Nýtt hlýtur að vera betra ?

- x86 örgjörvar
- Keyra Linux
- C/C++





Gömul tækni – nýtt líf

LEO & NTN



> iPhone14

Introducing Emergency SOS via satellite



KS fyrstir til að nýta sér nýja varaleið um gervihnetti

Lovisa Arnardóttir skrifar · 15. apríl 2025 09:52



Halldór Áskell Stefánsson, framkvæmdastjóri Skýja- og rekstrarþjónustu hjá OK.

ADSEND

OK býður nú upp á nýja þjónustu sem byggir á varaleið Farice um gervihnetti. Lausnin tryggir lágmarksnetsamband við útlönd ef fjarskiptasamband um alla sæstrengi við Ísland rofnar. Þjónustan er sérstaklega hönnuð með mikilvæga innviði og stofnanir í huga og veitir þeim aukið öryggi í fjarskiptum.

Fyrsti viðskiptavinur OK sem nýtir sér þessa nýju lausn er Kaupfélag Skagfirðinga.



EchoStar sells spectrum to SpaceX for \$17 billion

September 08, 2025



Elon Musk's SpaceX said it will buy wireless spectrum licenses from EchoStar for its Starlink satellite network for about \$17 billion, a major deal crucial to expanding Starlink's nascent 5G connectivity business.



Hubble Networks



**“We believe this is
comparable to
when GPS was first made
available for public use.”**

—ALEX HARO, HUBBLE NETWORK



➤ Tæki nú þegar til



Gamlir veikleikar



Bluetooth 1.0

- First formal version
- 1.1 point-to-multipoint
- 1.2 adaptive frequency hopping

Bluetooth 3.0

- Speed up to 24Mbps
- Transfer through WiFi channel

Bluetooth 5.0

- Long range PHY
- 5.1 location services (AoA/AoD)
- 5.2 LE audio, EATT
- 5.3 advertising enhancements
- 5.4 periodical advertising response



Bluetooth 2.0

- Enhanced data rate design (EDR)
- 2.1 Secure pairing/connection

Bluetooth 4.0

- Low Energy (LE) design
- 4.1 support for LTE
- 4.2 support IPv6 and 6LoWPAN



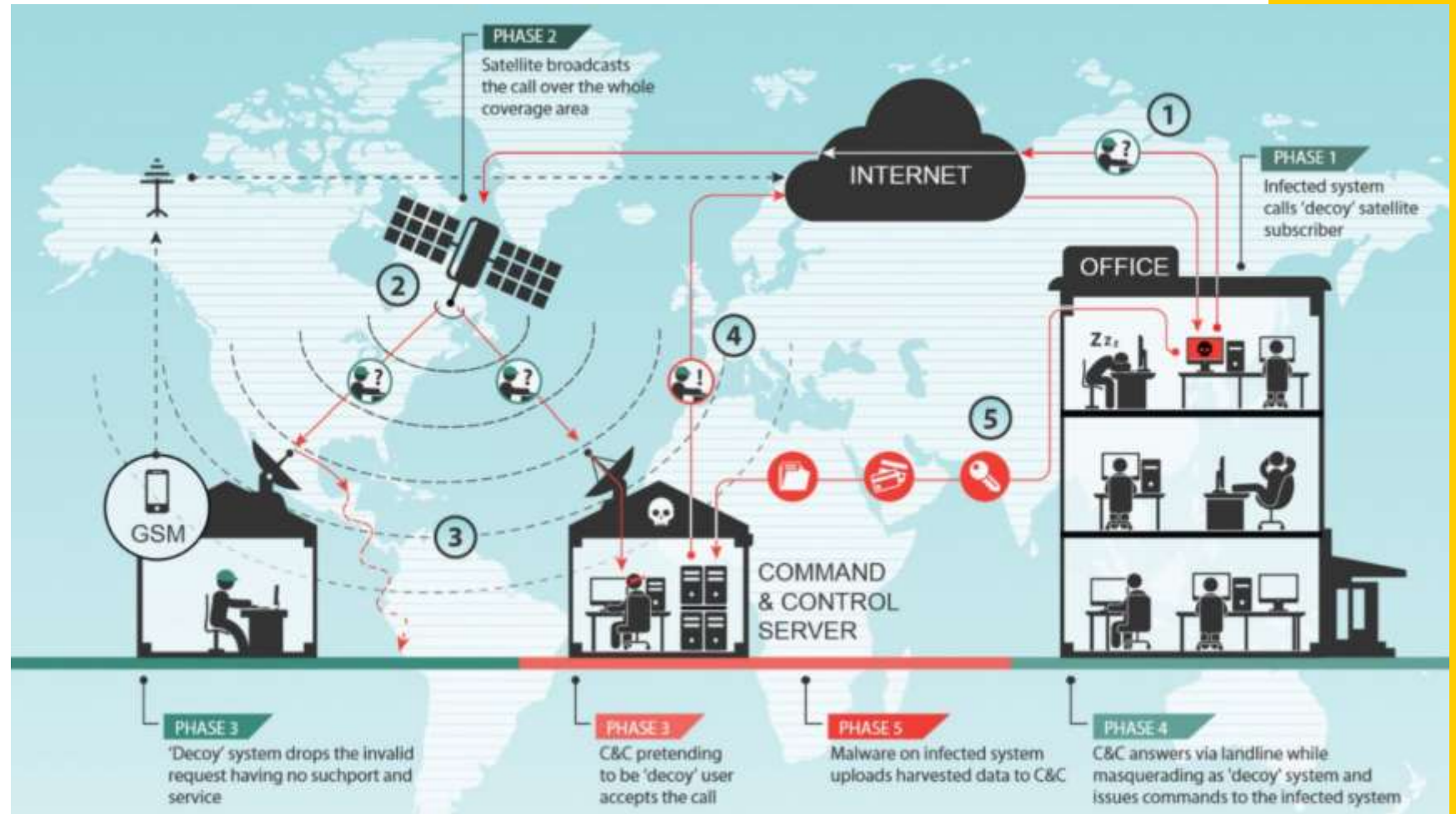
Bluetooth Vulnerabilities Recorded in CVE Data Feed



Source: SANS Survey 2003



➤ Turla Malware C2

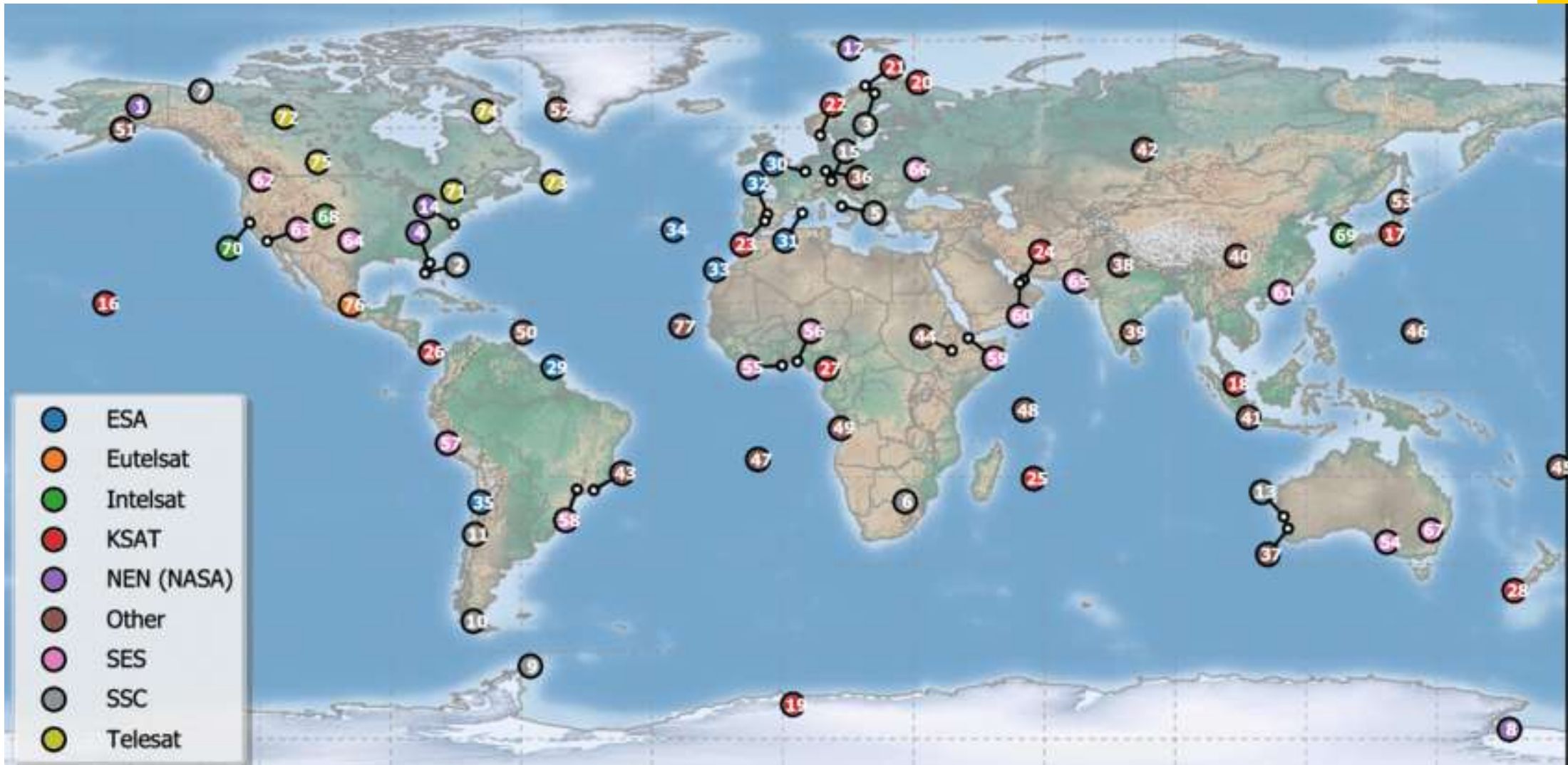


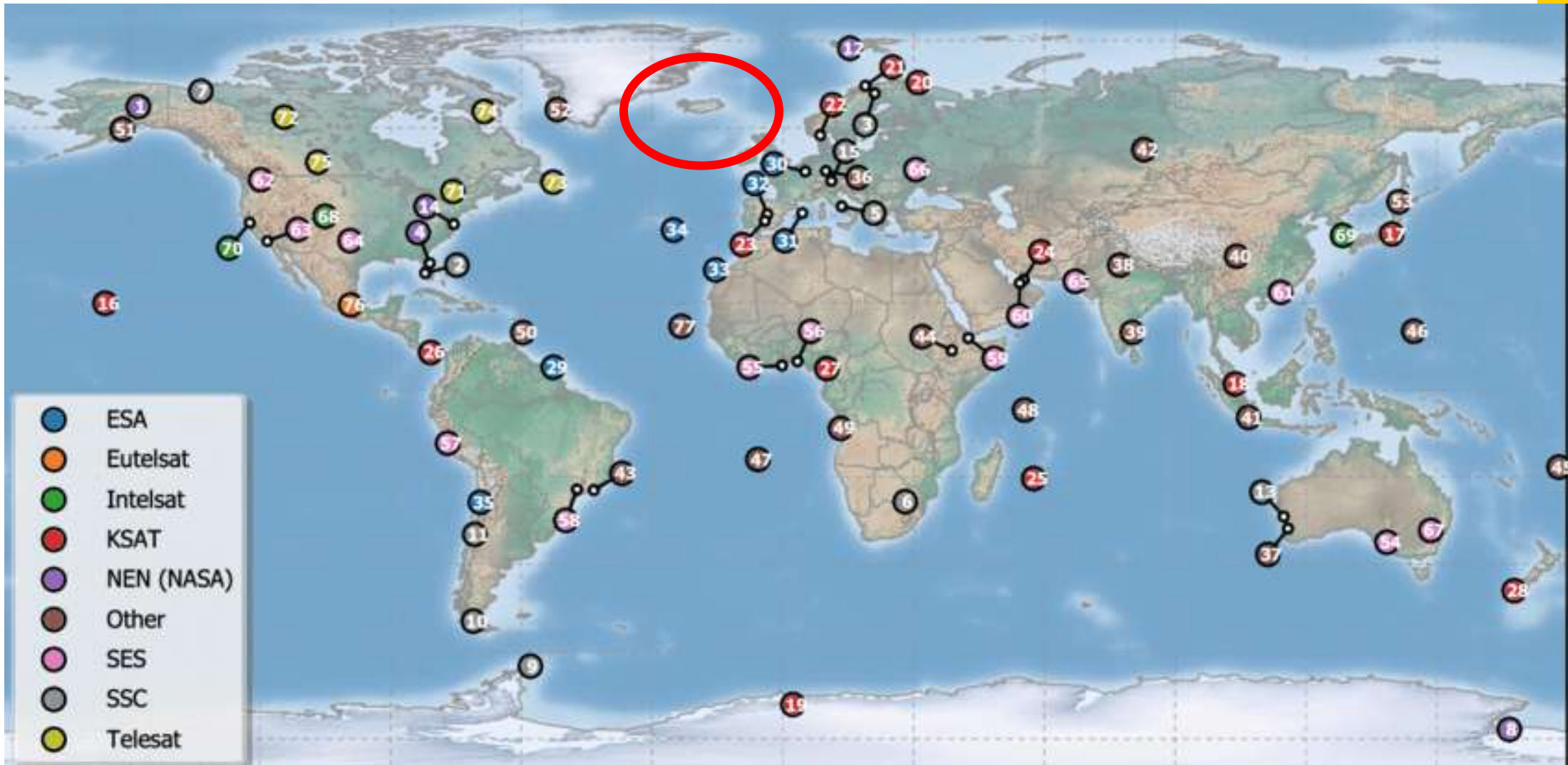
Source: https://media.kaspersky.com/pdf/SatTurla_Solution_Paper.pdf



Nýjar ógnir









Takk fyrir

