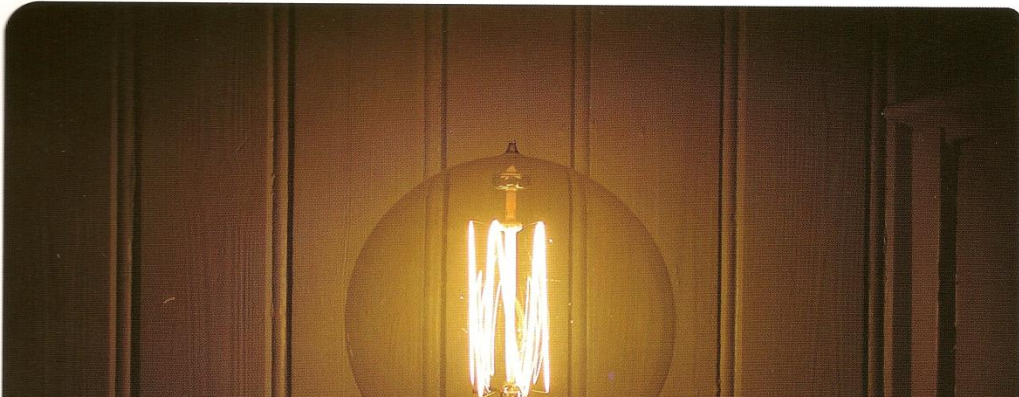




Næstu kynslóðar net: Eru Íslendingar tilbúnir?



Birgir Rafn Þráinsson
Framkvæmdastjóri
Gagnaveitu Reykjavíkur



árið 1908 var rafmagn enn munaður sem fáum veittist.
Í dag er öldin önnur.

ELSTA LJÓSAPERAN?

Þessi ljósapera, sem enn kviknar á, er 100 ára gömul og er varðveitt í Fjarðarselsvirkjun á Seyðisfirði. Er hún lýsti fyrst árið 1908 var rafmagn enn munaður sem fáum veittist.
Í dag er öldin önnur.

Getur þú hugsað þér daglegt líf án rafmagns?



Er VDSL líklegt NGN?



NGN architecture	Comments		
	Advantages	Disadvantages	Regulatory implications
VDSL in combination with fibre-to-the curb (FTTC)	Quick and cheap to roll out	- Capacity problems in the medium term - New entrants would be forced to scale up their investments. This could force them back on the incumbent network (i.e. using <u>bitstream</u>, LLU or SLU) or out of the market altogether. <i>a "dead end street for future capacity and competition"</i>	Unbundling requirements at street cabinet level would be needed to allow alternative access operators to stay in business.



Er PON líklegt NGN?

NGN architecture	Comments		
	Advantages	Disadvantages	Regulatory implications
Passive Optical Network (PON) in combination with fibre-to-the-building (FTTB)		Limited flexibility in the medium term due to compatibility requirements for network and end-user equipment. This makes unbundling of passive networks difficult, which can enable incumbents to increase control.	• New techniques (e.g. wave division technology) and/or new architectures are needed to provide unbundled access • Virtual unbundling as an alternative to <u>bitstream</u> access

Er Point-to-point ljósleiðaranet líklegt NGN?

NGN architecture	Comments		
	Advantages	Disadvantages	Regulatory implications
Point-to-point fibre deployment (FTTH)	- FTTH would be capable of meeting future demands for network capacity. - Unbundling, and therefore open access, is possible. 	High costs: existing ducts are often too small to contain multiple fibres so major construction spending is required. 	<i>"The only fully future proof approach"</i> when considering rising future demand and improving techniques. - The municipal approach would not be relevant for all of Europe and could lead to a fragmented landscape. - Guaranteed open access as applied by the municipal initiatives would perhaps <i>"make infrastructural competition less important than an open and high performance platform."</i>

Heimild:
TELECOMMUNICATIONS
EU level
Flash Message 06/2008
January 17, 2008

“On January 14, 2008 KPN, the Dutch fixed and mobile network operator which also has operations in Germany, Belgium and Western Europe, organised a seminar themed “Next Generation Networks: the end of infrastructure competition?” Viviane Reding, Commissioner for Information Society and Media and Ad Scheepbouwer, KPN Chairman of the Board of Management and Chief Executive Officer, spoke about the future of the European telecommunications industry in the context of Next Generation Networks (NGNs) and the role of regulation. Commissioner Reding gave an overview of the three main models for the future of the European telecommunications industry expressed in the context of Next Generation Networks (NGNs) and the role of regulation. “The latter is rarely being deployed by private market investors, due to its high cost, but also probably due to its openness, she said. She went on praising municipality projects such as Stockholm and Amsterdam. “

... og Reykjavík

Heimild:
TELECOMMUNICATIONS
EU level
Flash Message 06/2008
January 17, 2008

NGN og Gagnaveita Reykjavíkur



Um netið geta þjónustuaðilar boðið hágæða og háhraða þjónustu á borð við Internet, sjónvarp og síma.



Ljósleiðari lagður að heimilum á höfuðborgar-svæðinu og víðar. Um ljósleiðarann tengjast heimilin við öflugt Cisco NGN byggt á IP/MPLS tækni

Veitustarfsemi
– í samstarfi við sveitarfélögin

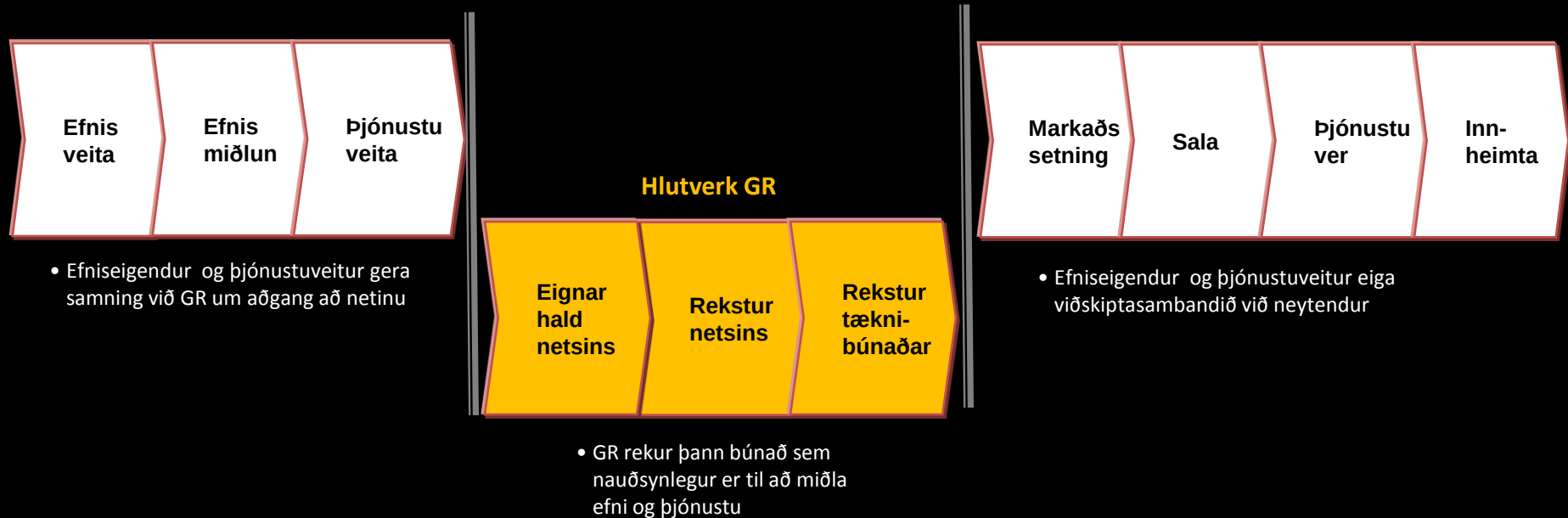
NGN: >50 Mbps IP

Ljósleiðari til heimila

Hugmyndafræðin er opið net
“Open/Equal Access Network”



- Skýr hlutverkaskipting: GR á og rekur netið en aðrir veita efni og þjónustu





GAGNAVEITA
REYKJAVÍKUR

Hvað þýðir þetta í raun?

Gagnaveita Reykjavíkur hefur undanfarin ár lagt ljósleiðara til þúsunda heimila og rekur nú umfangsmikið net, EAN

Nú þegar er í boði :

- 100Mbps Internet, óskert, sami hraði í báðar áttir
- Fjöldi samtíma myndstrauma (myndlykla) í IPTV
- Tilbúið fyrir háskerpuútsendingar (HD Ready)
- Fullkomin gæði, engin vandamál v/fjarlægðar, lélegra símastrengja eða lélegra móttökuskilyrða

Í haust verða hafnar prófanir með 1Gbps tengingar til heimila

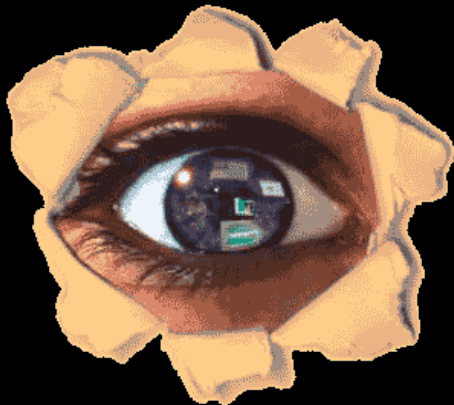
... NGN er þegar til staðar í boði GR



Miðlun efnis hvaðan sem er



Notendur stjórna notkun

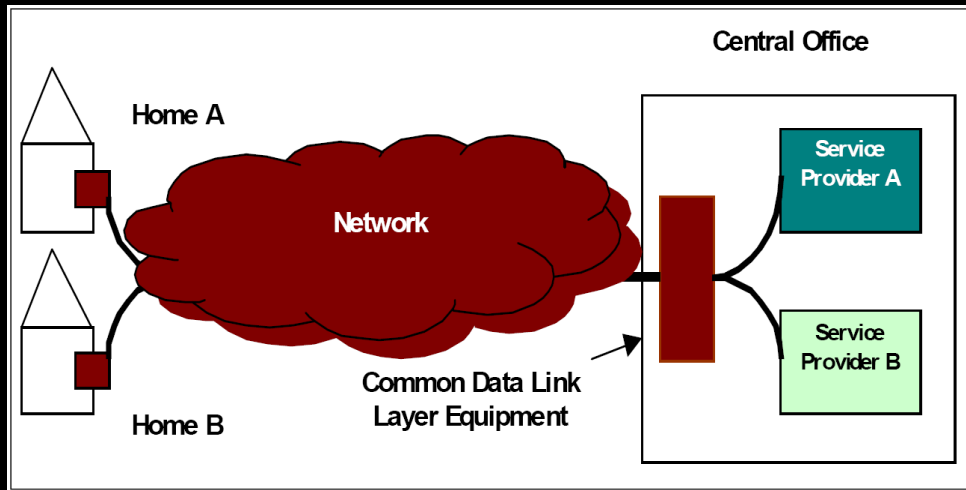


Hágæða myndstraumar
T.d. fyrir öryggisgæslu

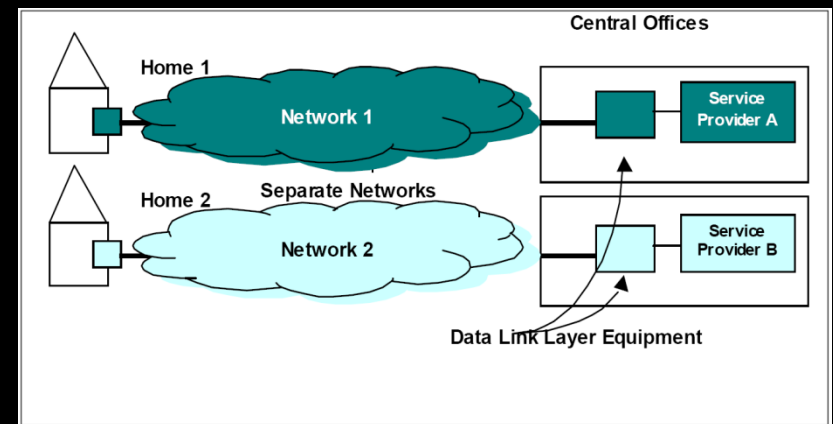
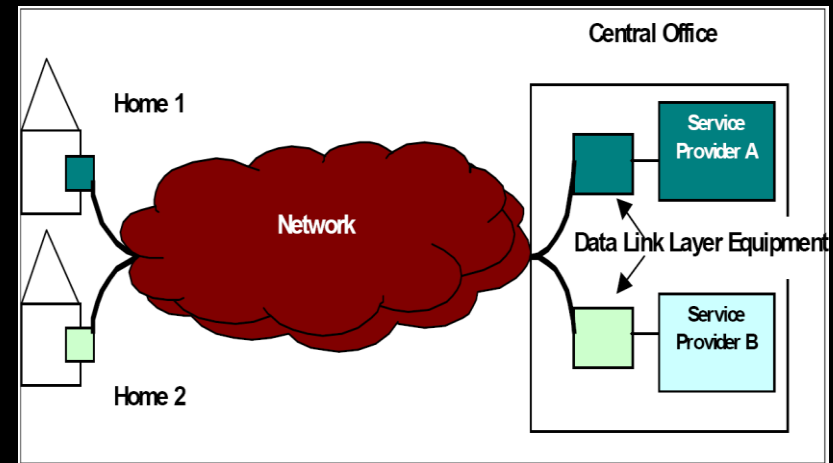


Háskerpusjónvarp
Hliðrað sjónvarpsáhorf

Samkeppni byggð á “Open Access”

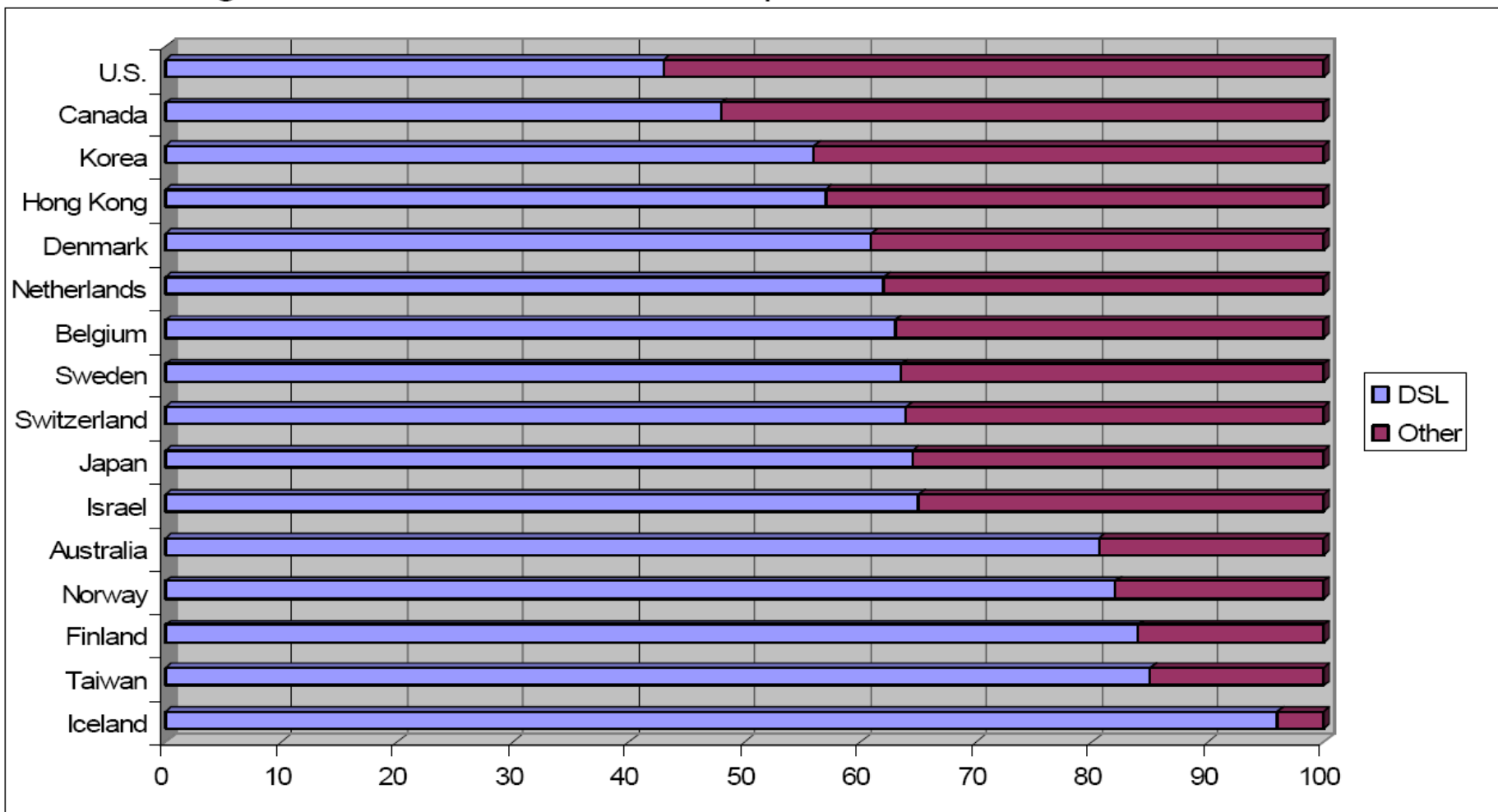


Framtíðarlausn fyrir
tengingu heimilis við
þjónustuaðila (“last mile”)



Flöskuhálsinn núna er tengingin til útlanda

Percentage of Broadband Market Composed of DSL versus “other” Platforms



The category “Other” includes cable, fiber/LAN, and additional non-DSL platforms including satellite and BPL.

Source: ITU World Telecom/ICT Indicators Database (2006), supplemented by OECD Broadband Statistics (Nov. 2007).

Gagnaveita Reykjavíkur



- Hóf starfsemi 1. janúar 2007
- Sjálfstætt fyrirtæki í 100% eigu Orkuveitu Reykjavíkur
- Eigandi að fjarskiptalögnum, ljósleiðurum og gagnaflutningskerfum sem OR hefur fjárfest í frá 1999
- Rekur ljósleiðaranet og netkerfi sem þjóna mörgum af stærstu fyrirtækjum landsins og fjölda heimila
- ISO9001 vottað – eina fjarskiptafyrirtæki landsins





GAGNAVEITA
REYKJAVÍKUR



LJÓSLÆÐARINN ~~SEM ÞÚ SÉRD~~ HÉR AÐ
OFAN FLYTUR MÁL ÞITT Á ÓGNARHRAÐA
OG FLYTUR ÞIG INN Í NÆSTU KYNSLÓÐ
FJARSKIPTALOUSNA