

Free700

From analog TV to free broadband

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From analog TV to digital



Digital Switchover

“Digital switchover is the name given to the process in which analogue broadcast television in an area is converted to digital television.”

Better coverage



700 MHz Offers the Only Affordable Network Solution in Sparsely Populated Areas

	700 MHz Propagation	1900 MHz Propagation	2400 MHz Propagation
<i>Total Network cost @\$150k/cell</i>	\$150,000	\$600,000	\$1,500,000
<i>Network Cost per Customer</i>	\$180	\$725	\$1820
<i># Mos. to Network Cost Breakeven</i>	9 Months	36 Months	91 Months

Cell Site Coverage per thousand square miles



**700 MHz
Coverage**



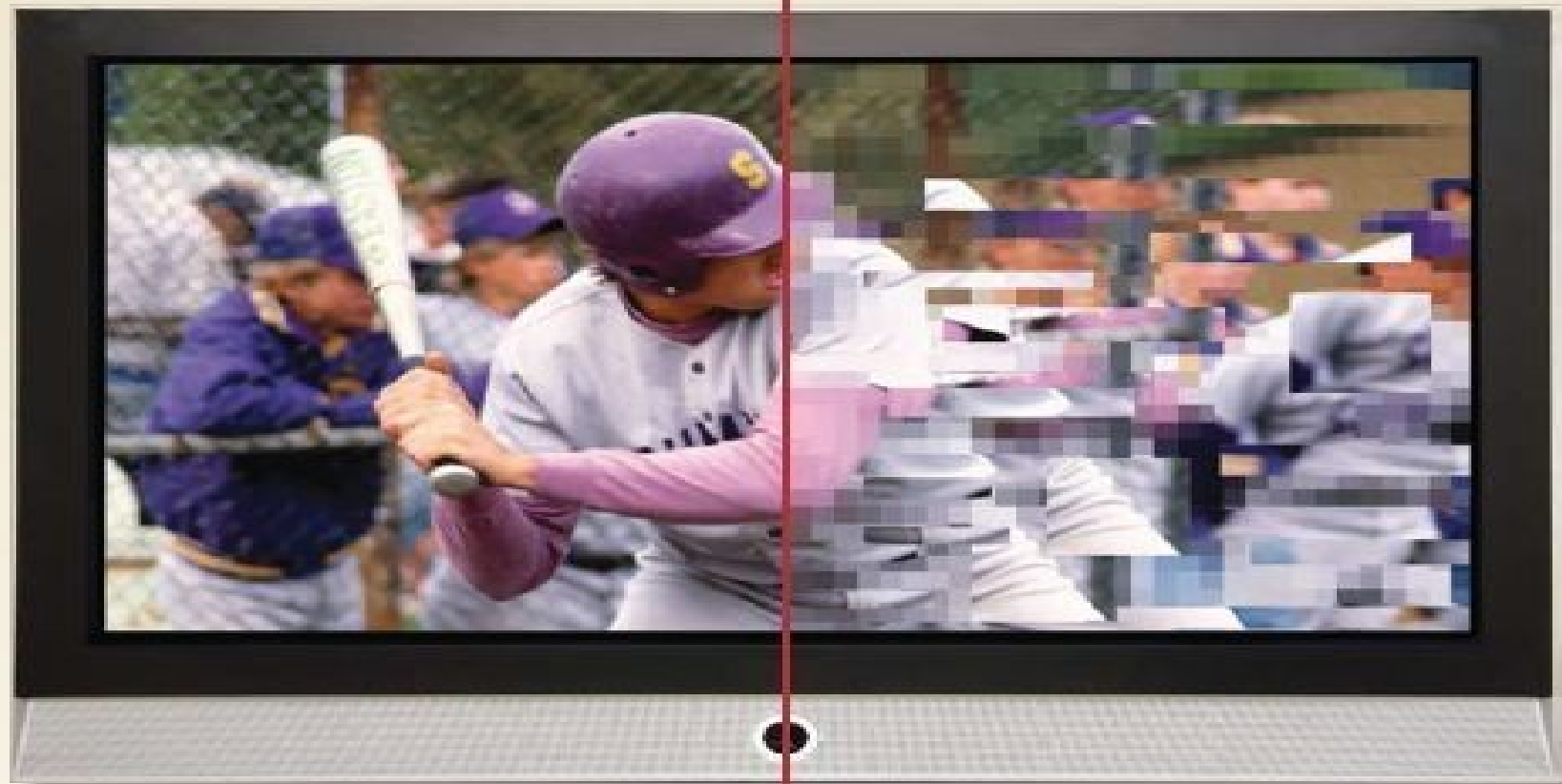
**1900 MHz
Coverage**



**2400 MHz
Coverage**

Who is the enemy?

Wondering What “White Spaces”
Look Like?



CRYSTAL CLEAR

INTERFERENCE

Google letter to the FCC

*“As Google has pointed out previously, the vast majority of viable spectrum in this country **simply goes unused**, or else is grossly underutilized. Our nation typically uses only about five percent of one of our most precious resources. Unlike other natural resources, there is no benefit to allowing this spectrum to lie fallow. The airwaves can provide **huge economic and social gains** if used more efficiently, as seen today with the relatively tiny slices utilized by mobile phones and WiFi services.”*

Gates lobbying

Reuters: Gates urges U.S. to free up more spectrum for Wi-Fi

“Microsoft Corp co-founder Bill Gates urged U.S. communications regulators on Thursday to free up more vacant television airwaves to be used for wireless services such as broadband Internet access.”



WiFi on Steroids

*"We're hopeful that that will be made available so that Wi-Fi can explode in terms of its usage, even out into some of these less dense areas (of the United States) **where distance has been a big problem for Wi-Fi**," Gates said in response to a question from the audience.*



The enemy

*"Broadband penetration could be drastically improved through a fixed, licensed service without interference to TV reception. Unfortunately, Microsoft continues to push for **an unlicensed technology that simply does not work**," said Dennis Wharton, a spokesman for the National Association of Broadcasters.*

*"TV viewers should not be inundated by the **inevitable interference caused by such faulty devices**," Wharton said.*

Prototypes

*"Microsoft's device **failed** to detect signals below -114 dBm, the threshold touted as an appropriate spec by the White Spaces Coalition, a group of eight major high-tech companies. The Philips device reliably detected signals as low as -115 dBm in bench tests (the manufacturer said it was not ready for field tests)."*




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☐



LINK! 700MHz FREQUENCY GOING FAST! MONOPOLY!

P

US auctions: who wins?



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Congratulations, the item is yours!

Hi ~~Google~~, Verizon

Congratulations on winning this item! The next step is to pay the seller.



700MHz FREQUENCY L@@@K

Sale price: \$4,600,000,000.00

Shipping & Handling: US Postal Service Media Mail \$3.50

Seller: FCC [\[contact seller\]](#)

Seller Information: Federal Communications Commission
445 12th St. SW
Washington, DC. 20554

Arrange payment

Pay For It

Open Access



Open Access

- (1) open applications
- (2) open devices
- (3) open wholesale services
- (4) open network access

Swath of 30Mhz unlicensed?

- Campaign?
- Italian campaign for free Wimax
- Free700.eu soon
- Make EU more competitive than the US
- Silly auctions

Swath of 30Mhz unlicensed?

- Problems
- Restrictions of use
- Transmit power
- Commercial or not
- Live with interference
- Software defined radios (SDR)
- Cheap internet access

Swath of 30Mhz unlicensed?

- Wimax Libero!
- 120.000 signatures in IT
- Europe: national policy
- Telecom package
- Cfr QuadratureDuNet
- Fragmented market
- Space for “experimentation”

Free our spectrum!!!

FREE INTERNET NOW!

Future

Permanent Testbed
now!