

Extra Feature Story

Many Americans Unprepared for Transition to All-Digital TV

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Less than a year from now, a long-planned transition from analog to digital television will be completed, but unaware consumers could be left without functioning TVs.

The U.S. Congress has mandated that at midnight on Feb. 17, 2009, all transmission of analog TV signals will stop and only digital signals will be transmitted.

The change will free up broadcast frequencies for public safety communications, such as emergency rescue, and will allow stations to offer improved picture and sound quality, according to the Federal Communications Commission.

An analog signal is the transmission of data as a radio wave vibration in the air. A digital signal breaks the data into a string of 0s and 1s that is sent to the television via satellite, cable or a digitally converted antenna signal. A digital signal is not as susceptible to interference and allows for a larger volume of data.

Most TV stations are already transmitting both analog and digital signals. So-called low power television (LPTV) stations, which transmit weaker signals reaching small communities, are exempt.

Analog to digital

Transmission of digital signals takes up a smaller range of the broadcasting spectrum than conventional analog transmission. The U.S. government has auctioned off those parts of the spectrum that will no longer be in use.

Most of the freed-up airwaves will be used commercially for expansion of wireless and broadband services, while a smaller portion will be used by emergency response personnel. The revenue from the auctions is an estimated \$19 billion.

The cost of the transition for the typical TV station is around \$500,000 for new equipment. Broadcasters hope to increase viewership with expanded services and high-definition picture quality.

Consumers can expect more channels to choose from, a clearer picture and the introduction of services such as interactive shopping, but consumer rights groups also point to a number of problems.

Not everyone is digital-ready

The U.S. Congress established a timetable for the transition to digital television (DTV) in 1996, but a January 2008 poll by the Consumer Reports National Research Center found that more than one third (36%) of Americans did not know about the upcoming switch to DTV.

According to media research provider Nielsen Company, 10% of U.S. households are not ready for the digital switch.

These numbers indicate that many people are digital-ready, but don't know they are. TV sets connected to a cable or satellite system do not need upgraded. There is concern among consumer

advocates that people will buy equipment they don't need or sign up for a cable service because they are unaware of other options.

There are about 13 million households in the U.S. that get TV broadcasts exclusively over the air on analog sets, and another 6 million households that have a least one TV set receiving programming over the air on analog TV stations.

Hispanic households make up the majority of these households, which means they will be most affected by the transition to DTV.

According to the Nielsen study, at 17.3%, Hispanic households also make up the largest percentage of those not digital-ready, compared to 8.8% of white households.

A recent study from market research firm Centris has also suggested that nearly 6 million viewers may get limited reception after the transition, due to gaps in digital broadcasting. Picking up a weak analog signal still allows for some reception, while poor digital reception will lead the broadcast to freeze, fragment or go blank altogether.

Privacy concerns

There is also concern about consumer privacy. Digital transmission and interactive services will allow for tracking of consumer habits, similar to how companies track behavior on the Internet.

Marketers will be able to collect consumer data, especially through interactive services, enabling them to tailor advertisements to consumers. Consumer advocates fear that viewer data and habits will not only be tracked, but sold and combined with data compiled elsewhere, allowing for the creation of detailed profiles.

Consumer advocates have criticized the federal government for not spending nearly enough money on public education, and instead leaving the information campaign largely up to broadcasters, manufacturers, and cable and satellite companies, some of whom might try to use consumers' lack of information to their advantage.

Help for consumers

The U.S. government has set up a Web site to inform consumers (<http://www.dtv2009.gov>). For consumers who rely exclusively on analog broadcast via an antenna, the federal government is giving away coupons for the purchase of a digital converter box which can be ordered online or by calling 1-888-DTV-2009. Each consumer is entitled to two coupons. The coupons expire 90 days after being issued.

Viewers with new TV sets equipped with digital tuners, or viewers whose TV sets are connected to cable or satellite services will not need these converter boxes, nor will they have to buy any other equipment.

-- Compiled by Indre Uselmann for NewsHour Extra

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