

## The DTV Transition: Background Summary

### The Law

Under the Digital Television Transition and Public Safety Act of 2005, all full-power television stations were required to switch off their analog signals and begin broadcasting exclusively in the digital format by February 17, 2009. However, in early February, the U.S. Congress approved an extension of the deadline to June 12. The switch from analog to digital broadcasting is known as the digital television (DTV) transition. Some stations will make the transition to digital prior to June 12 due to unique technical issues.

### The Difference Between Analog and Digital Broadcasting

DTV enables television stations to provide dramatically clearer pictures and better sound quality. By transmitting the information used to make a TV picture and sound as “data bits” like a computer, television stations can also carry more information using digital broadcasting than is currently possible with analog broadcast technology. For example, DTV makes it possible for stations to broadcast multiple channels of free programming simultaneously, called “multicasting,” instead of broadcasting only one channel at a time. Digital technology also enables television stations to provide free, over-the-air high definition television (HDTV) for consumers with HD television sets. The picture quality of HDTV is also better over the air in its purest form.

Author Thomas L. Friedman provides a useful description of digital technology in his book *The Lexus and the Olive Tree*:

*“Digitization is the wizardry by which we turn voices, sounds, movies, television signals, music, colors, pictures, words, documents, numbers, computing language and any other form of data you can think of into computer bits and then transfer them by telephone lines, satellites and fiber-optic cables around the world . . . Digitization involves reducing any sound, picture, number or letters into a different code of 1s and 0s, and then transmitting them through telecommunications to another point where those 1s and 0s are decoded for the receiver and reconstituted into something very close to the original . . . It is much easier for the device receiving such a signal to read exactly what it is . . . This is why digital copies are always so much sharper and why anything that is sent as a string of 1s and 0s from your mouth or fax or computer in New York will automatically come out as the same 1s and 0s on the other end.”*

The transition to digital television also frees up some of the airwaves since digital signals use less of the spectrum than analog signals. When the transition is completed, television broadcasters will vacate part of the spectrum — the so-called 700 MHz band consisting of channels 52-69 — which the government will reclaim for other uses.



**The National Association of Broadcasters (NAB) is leading an extensive consumer education campaign to ensure that no American is left unprepared for the transition to DTV. NAB's DTV transition campaign includes:**

- **Research:** Working with some of the best survey research teams in the country to craft effective messages to reach diverse audiences and track consumer awareness levels.
- **Earned Media:** Working with reporters to ensure accurate coverage of the DTV transition across print, broadcast and online mediums.
- **Marketing and Paid Media:** Using innovative marketing tools and advertisements to help raise consumer awareness of the transition and producing high-quality "DTV Action" television spots for broadcasters to air in markets that have not yet made the switch.
- **Speakers Bureau:** Enlisting local broadcasters to address their local communities about the transition and help them prepare.
- **DTV Road Show:** Coordinating a traveling media event that has reached more than 200 cities.
- **DTV Transition Coalition:** Bringing together a diverse group of public and private organizations that share an interest in a successful transition to digital television.

The DTV transition is the greatest advancement in television technology since the introduction of color, and viewers everywhere will benefit. But consumers must take the necessary steps to upgrade to digital or risk losing access to free over-the-air television.

**For more information about the NAB's DTV transition campaign, please contact Shermaze Ingram at (202) 429-5477 or [singram@nab.org](mailto:singram@nab.org).**

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