

**New Technology Policy Forum US****The other transition: analog switch-off**Eli Noam JANUARY 16 2009

---

The first crisis for the Obama administration may not take place in Wall Street or Detroit but in peoples' living rooms across the country. According to law, on February 17 the plug will be pulled on traditional analog broadcasting in the US. Digital signals will then be the only way to receive TV over the air.

This transition will be inevitably messy. How the Obama Administration will deal with it is an early indicator on how it approaches problems. So far, it has asked Congress to postpone the transition by a few months. This is quite sensible but misses an early occasion for public leadership. It treats this technological change as an administrative problem instead of a great opportunity to inspire a shared effort in national innovation. But it is not too late to take that course.

What is the problem? Older analog TVs that receive their pictures from over-the-air broadcast signals rather than from cable or satellite will soon go dark unless they are connected to a special converter box. This will affect 10 million households directly, a similar number for their second or third TVs, and many TV sets in offices or workplaces. Converter boxes can be bought for about 60 dollars, and a federal coupon program kicks in a \$40 subsidy. However, the money to pay for these coupons has run out, leaving over one million applicants without them. Also, a new antenna is often required, whose installation on rooftops in February is not a pleasant task. There are other technical problems. Most troubling is that viewers located at the edge of a broadcaster's footprint may lose its reception since digital signals are at a higher frequency and drop off abruptly (the "cliff effect") rather than gradually as analog signals do.

TV watching is deeply part of society. Americans watch TV for seven hours per household, on average. Even if only two per cent of the population is negatively affected, that's six million of deeply unhappy people. Many of them will be rural, low in income, not tech savvy, and advanced in age.

The Obama Administration has thus been handed a potential mess not of its own doing. It has several basic options.

1. *Wait and see.* A field trial was held a few months ago for the Wilmington region in North Carolina. The results are not encouraging. According to research data from Alan Miles of Barclays, if one projects the hot-line calls from Wilmington to the national scene, there will be, within the first week, 1.2m households with poor reception; 413,000 with converter box problems; 125,000 with assorted technical problems; and 676,000 with other problems. Altogether there would be almost 2.5m unhappy households calling in to complain. And this is probably a low estimate since Wilmington is small and flat in its geography, and was inundated by media messages, FCC consumer hot-lines and subsidy coupons related to the transition.

2. *Blame the previous administration.* This would be unproductive as well as only partly true. Yes, Republicans grossly underestimated the cost of the coupon program. But the framework for the digital transition was set during the Clinton years for an even earlier (though softer) deadline, the dates were revised by Congress across party lines, and the process was supervised by a Federal Communications Commission that includes members of both major parties.

3. *Postpone the inevitable.* The Obama people have already asked Congress to move the transition deadline. While a few months for additional preparation seem reasonable, it merely delays the time of reckoning. Many consumers will be unprepared whatever the date. And the longer the postponement, the more the problem will be blamed on the new team. There will also be a cost to delay, since the analog airwaves have been allocated to police and fire departments, or auctioned off to mobile wireless companies whose plans will be in disarray and who will ask for compensation. The one concrete consumer issue that is time-sensitive is additional funding for the subsidy coupons. But this should be dealt with through decisive action in immediate added budget allocation and by making the coupons redeemable retroactively. People and industries should not have to change plans to fit Congress' schedule, it should be the other way around.

4. *Assume leadership.* This is a great opportunity for a new President to set a positive tone to the nation, combining the themes of innovation, infrastructure, can-do spirit, community, and American leadership. People are willing to go through inconvenience if they understand the broader purpose, and how they and the country will be better off in the end. Moving to an all-digital TV is a landmark step. America initiated the all-digital approach at a time when others, such as Japan, were still betting on an analog future. It is now the first major country to move over to an all-digital TV system. This new TV enables high-definition pictures, many new broadcast channels, and a much closer integration with the Internet. Public safety service will be enhanced, as will be the wireless Internet. The move to an all-digital system should be the cause for great satisfaction. A President, appearing on TV himself now, can express this, explain a delay if necessary, call on community members to assist their elderly and others, and exhort immediate Congressional budgetary action.

This is a solvable problem. Whether the transition happens in February or June, millions of Americans will overcome the problems using their own initiative, their neighbours' help, and Federal assistance. After a few rocky weeks, a successful outcome is foreordained. We will have a better TV system in the end.

*The writer is professor of finance and economics at Columbia University.*

---

[Copyright](#) The Financial Times Limited 2022. All rights reserved.

---

