NEW YORK: At midnight on Feb. 17, 2009, the rabbit ears and the rooftop antennas that still guide television signals into nearly one of every five U.S. homes will be rendered useless - unless they are tethered to a new device.

Two versions, which the government will spend as much as $80 a household to help families buy, were unveiled Wednesday.

The V-shaped rabbit ears, which have stood sentry in some living rooms and dens since the early 1950s, risk going the way of the eight-track tape player or Betamax in 20 months. That is when local television stations will cease sending their signals over the analog airwaves and instead begin transmitting their programming exclusively over the more modern digital spectrum.

The change, set in motion by Congress and the Federal Communications Commission in the mid-1990s, is being made at least partly to give viewers a better quality picture and to make it easier for stations to broadcast in high definition.

"The moment coming is the end of something that has been around for 60 years - conventional television - and it has been a wonderful era," said Richard Wiley, a former chairman of the commission who led a government advisory panel on what was then known as "advanced television" from 1987 to 1995.

"With that ending will come this new digital world, this much greater world," Wiley said, "but many people aren't yet ready or haven't gotten the word."

Those families still using antennas on their roofs or atop their sets to watch David Letterman or "Desperate Housewives" - nearly 20 million U.S. homes, according to government figures - will eventually be unable to see their favorite programs. They must have a digital-ready television or a converter that will serve to translate the new signals for old TVs and their antennas.

(Those viewers who already get their television from satellite or cable providers are not expected to have much disruption.)

That is where the government vouchers come in. On Wednesday, the National Association of Broadcasters, the powerful trade lobby representing television networks and stations, lifted the curtain on two prototypes for those basic, digital converters - one made by LG, the other by Thomson, which is distributed under the RCA brand.
They will start appearing in electronic and department stores in January, at an expected cost of $50 to $70.

To ensure that viewers' uninterrupted access to free, over-the-air television does not pose a financial hardship, a government agency - the National Telecommunications and Information Administration - will issue $40 gift cards.

Consumers who want to buy the converters thus will not be left behind when television as we have always known it goes dark in early 2009.

Beginning in January, consumers may apply for up to two coupons each, for a total of $80.

All told, the government has set aside $1.5 billion to help viewers pay for the converters, although it expects to recoup that cost - and more - by later auctioning off the portion of the broadcast spectrum that is being vacated by the TV stations.

While some of the unused spectrum will be given to public safety agencies like police and fire departments - because those frequencies are useful at passing through buildings and walls - much of it will be bought by cellular and other wireless companies seeking to expand their services.

The legislation establishing the $40 coupons was passed by Congress in late 2005, with the support of telecommunications and software companies. At least some of them are expected to either manufacture the digital converters or to bid for the older frequencies being returned by the stations.