



Digital Emergency Alert System (DEAS) FACT SHEET

America's Alert & Warning System

The Emergency Alert System (EAS) is the public alert and warning system in the U.S.

The President is the sole activator of the national-level EAS. The alert is operated and maintained by the Department of Homeland Security (DHS).

About DEAS

APTS and DHS are laying the foundation for a new generation alert and warning system for the American public. The current EAS has its roots in the Cold War, where someone had to be watching one of the three major networks or listening to a radio station to have a chance of receiving the alert. The Digital Emergency Alert System brings the EAS into the 21st Century, meeting the needs of our mobile, networked, and digital America.

The government mandate to transition all television broadcasting to digital induced the Association of Public Television Stations (APTS) and DHS to create a Digital Emergency Alert System (DEAS). This new system improves emergency managers' and public safety officials' ability to communicate with the general public during an emergency via today's popular communications channels like cellular phones and personal data accessories (PDAs).

APTS and DHS, along with participants from the broadcast, cable television and wireless industries, recently completed two six-month testing phases of the DEAS. The next step is the build-out of the system so that all public television stations can enable information to be sent to local first responders and the public.

DEAS Benefits

Critical information will be delivered to emergency managers and other state officials during times of national crisis through the use of local public television's digital infrastructure. When fully operational, the DEAS will alert emergency managers and state officials via broadcast and cable television, terrestrial and satellite radio and other wireless networks, such as cell phones and PDAs. Transmission of data over the digital broadcast signal is nearly instantaneous and can be distributed simultaneously to thousands of sites.

Why are public television stations involved?

Currently, 99 percent of American households receive a signal from one or more public television stations. The recent mandate to transition television broadcasting to digital creates a natural channel to distribute a digital emergency alert to people nationwide.

Once the digital build-out is complete, nearly all homes, schools, government buildings and businesses will be able to receive digital, non-commercial public safety signals and educational

information. The DEAS underscores public broadcasters' commitment to public service at the local level.

Why Digital Television?

Transmitting information via digital television decreases the potential for interrupted service. As demonstrated during the 9/11 terrorist attacks and the August 2003 blackout in New York, alternate methods of communication like Internet-based email and wireless phone service are susceptible to system overload.

Digital public television is providing the backbone for a network of networks that can deliver instant warnings to people wherever they are or whatever they're doing. Initially, this will be a government to government and government to media system. Eventually, it will be a warning system for all hazards that can reach practically all devices. Whether someone has their cellphone at a kid's soccer match, is listening to satellite or broadcast radio, surfing the Internet, or watching any of the 500 channels on TV, DHS can get an emergency message to the vast majority of Americans almost instantaneously.

How DEAS Works

Using a technology called "datacasting," public television transmitters wirelessly distribute video streams and data files to computers and computer networks.

Public television's digital alert system immediately disseminates critical information to federal, state and local government officials and emergency managers in the event of a crisis, such as natural disasters or a terrorist attack. Information like real-time traffic flow or road closures and aerial photographs or video can be simultaneously distributed to hundreds or even thousands of receivers in the event of an emergency in real-time.

About Datacasting

Datacasting is an innovative one-way broadcast service that, when combined with an existing high-speed network, can stream video or disseminate large files to thousands of locations simultaneously.

Datacasting offers a greater footprint to distribute information. This technology allows the DEAS system to be addressable so that public safety officials can pinpoint to whom the information is sent, and distribute critical information over a variety of media, such as cell phones, PDAs, pagers and computers.

Datacasts are transmitted through a digital television signal and a receiver hooked up to a personal computer, laptop or computer network. Homes, schools, government buildings and businesses can experience the benefits of datacasting by simply installing a special receiver and antenna. This inexpensive equipment is currently available commercially.