

REMARKS OF FCC COMMISSIONER BRENDAN CARR
AT THE NATIONAL ASSOCIATION OF BROADCASTERS SHOW

“ATSC 3.0: A NEW BROADBAND PIPE”

LAS VEGAS, NEVADA

APRIL 8, 2019

Thank you, Senator Smith, for the kind introduction, and thank you to NAB for the invitation to join you in Las Vegas for your annual conference. This is an exciting and transformative time for broadcasters. And one of the biggest reasons for this is the technology we’re discussing at this afternoon’s event: ATSC 3.0.

Now, I know the term ATSC 3.0 does not exactly roll off the tongue. And we can probably rest assured that no one burned through their scarce marketing dollars when they came up with the term. But what we’re talking about is actually a pretty exciting technology that can bring new and creative services to market. So I think it’s great that we’re focusing on it at this event.

In my view, ATSC 3.0 is part of a broader shift we’re seeing towards next-generation connectivity—one that is going to usher in a new wave of innovation and opportunity for Americans. You see it on the wireless side with the buildout of 5G networks. You see it a couple hundred miles above us with a new generation of low-earth orbit satellites ready to launch. And you see it across the country as fixed broadband providers upgrade and extend their networks to support new use cases.

Up to now, a lot of the buzz around ATSC 3.0 has been tied to the promise of Next-Gen TV. And looking around the show floor today, you can certainly see why. This new standard will bring 4K and Ultra HD video to the airwaves. It will enable broadcast TV signals to be delivered right to your smartphone or tablet. And it will usher in a more interactive, accessible, and personalized experience for the viewing public.

And these new features aren’t just exciting for their entertainment value. They also have the potential to vastly improve public safety—whether it’s geo-targeted and encrypted information sent directly to first responders, or multimedia AMBER alerts to provide the public with more accurate and complete information during times of crisis.

At last year’s show, I spoke about the importance of broadcasting during emergencies, and why the FCC must continue to remove needless regulations that divert resources away from what broadcasters do best—serving their communities. And that’s also why it’s so important that the FCC authorized broadcasters to start experimenting with ATSC 3.0, giving you the freedom to innovate—a freedom that your competitors and many others in the tech sector already enjoyed.

And when I think about the ways that broadcasters can use that freedom to innovate, one use case stands out to me: ATSC 3.0 as a new and competitive broadband pipe. The technology has the potential deliver a 25 Mbps data stream to Americans all over the U.S. As an IP-based standard, ATSC 3.0 will enable broadcasters to leverage the same protocols that we use today in our broadband networks. And there's interesting work ongoing to solve for the return path, where that type of communication is needed.

While it's hard to predict all of the consumer applications or business cases that could benefit from this new broadband pipe, there's already buzz around a few. Take autonomous vehicles, where ATSC 3.0 could play a pivotal role. It could send out targeted map and traffic data or provide large, fleet-wide software updates. For IoT, smart ag, and telemedicine applications, ATSC 3.0's low-band spectrum could provide an efficient means of communicating with devices over wide areas. For 5G, it could help augment coverage or add capacity by shifting data off of cellular networks. And for consumers, it could present a new choice for downloading data, including movies or applications right to your device. As we look to push more and more data to the edge of the network, ATSC 3.0 could provide one way of moving all that data in an efficient and cost-effective manner.

In fact, we're already seeing some interesting work in these areas. In Lansing, Michigan, a PBS affiliate located at Michigan State University applied for an experimental license to use ATSC 3.0. They're researching ways to use the signal to provide rich media content to households that currently don't have a broadband connection. They're also integrating ATSC 3.0 with the university's IoT research, including automotive applications and exploring use cases from education to telemedicine to smart cities.

In North Carolina, the university system is establishing a multipurpose research center for ATSC 3.0. The center will be a hub for training and testing the capabilities of ATSC 3.0 for emergency responders, state agencies, students, non-profits, and other public safety organizations. It will leverage the expertise of a variety of stakeholders, including broadcasters, technologists, app developers, cybersecurity experts, and others to help realize the benefits of 3.0 for public safety institutions. Last May, for example, broadcasters were able to use ATSC 3.0 to transmit and receive a 911 dispatch—the first successful transmission of its kind.

This is in addition to other trials that are underway. In Phoenix, Pearl TV and others launched an ATSC 3.0 test bed, where broadcasters can experiment with the new standard. In Santa Barbara, which has been hit by wildfires in recent years, broadcasters are testing the delivery of highly localized news and emergency information to a variety of devices. In Raleigh, on my first trip outside of D.C. as an FCC Commissioner, I visited WRAL-TV, which was the first station in the country to simulcast in ATSC 3.0 and bring new services to the market.

These benefits will extend beyond the commercial space to public safety. For instance, many fire stations still receive notices through analog means, like paging, and their queues can get overwhelmed during emergencies. Broadcasters are already working with fire stations to see how ATSC 3.0 can reduce the time it takes to notify fire departments without sacrificing the security and resiliency of analog networks.

As with most transformative shifts, the possibilities of this one-to-many broadband pipe are difficult to predict today. But what is clear is this: broadcasters are already exploring innovative new applications that are well outside their traditional comfort zone of delivering over-the-air television. I am glad that this FCC has been working to remove the outdated regulations that only made it harder for broadcasters to compete in today's market.

While ATSC 3.0 may not have the same brand recognition as one your new hit shows, I think the American public are going to soon see the benefits of this technology. So I want to thank you again for the invitation to join you at this event and for letting me offer a few words on the future of ATSC 3.0 as a new broadband pipe. I look forward to learning more during this year's show and hearing from you about the steps we can take at the FCC to support your good work.