

May 2, 2016

Chairman Tom Wheeler and the FCC Commissioners  
445 12th Street SW  
Washington, D.C. 20554

Re: Comments on the proposed ATSC 3.0 broadcast TV standard

Dear Chairman Wheeler and FCC Commissioners;

My background is in technology and I have been in television engineering for 35 years. I started learning about electronics when I was in high school through ham radio. I have build antennas, RF amps, etched circuit boards, designed analog and digital circuits, and much more. I've built FM and TV transmitter sites, engineered microwave paths, and have done basically everything there is do in broadcast engineering. Basically I'm a geek and have always had a love for technology. I felt that it was important to give you this background because I didn't want to come across as expressing an opinion and not really understanding the technology.

While I think the ATSC 3.0 standard is wonderful and offers many new features and capabilities, I'm not optimistic about it's chances of succeeding in the marketplace because it's just too late to the party. I appreciate and really like the technology, but I'm also a realist and understand that there is more to this than just the technology. Looking back to the start of digital OTA TV, the reality is that 8VSB should never have been adopted. We should have went with COFDM for a much more robust transmission scheme. The best technology didn't win that race because it was won by big businesses who had a lot of money riding on 8VSB being adopted. Like it or not, we're stuck with 8VSB. Fortunately, new advances in receiver design since 8VSB was first adopted have helped with reception issues somewhat.

Telling OTA consumers that their current televisions won't work yet again will just not fly with the public. They will walk away and subscribe to cable or satellite. We will basically kill OTA TV for our viewers if we turn off our 8VSB transmitters and broadcast using ATSC 3.0.

All this said, I'm not saying we need to kill ATSC 3.0, but what about at the same time also expanding the current ATSC standard? It is my understanding that most new digital TVs with 8VSB tuners will decode MPEG4 video if it is used instead of MPEG2 with no changes on the consumer end and just changing to MPEG4 encoders on the broadcaster's side. Better codec efficiency is one of the biggest reasons for adopting ATSC 3.0. We can have that in the current ATSC standard without telling the American public to throw away their digital televisions and asking them to start over yet again. Adding MPEG4 and potentially other better codecs to the current ATSC standard would free up bits in the broadcast stream for other uses. The current ATSC standard basically carries packets (buckets of bits) to consumers. We can fill these buckets with



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whatever we want including higher order codecs to greatly improve audio and video quality without dumping the current system and alienating the public.

I'm sure the consumer electronics companies as well as the broadcast supply vendors will oppose this comment because they want ATSC 3.0 to be adopted so they can sell more hardware. They will also argue that we need ATSC 3.0 for mobile. I don't see mobile ever being used on a cell phone type device because AT&T and Verizon will never allow ATSC 3.0 tuners to be in phones because they make their money selling data and streaming data based video. Adding tuners would cut into their data revenue, so it won't happen. Maybe when self driving cars are the norm, then mobile television will be important, but not until then.

In closing, I am not opposed to the approval of the ATSC 3.0 standard on a voluntary basis, but also along with that, the current ATSC system should be expanded to allow for more efficient codecs to be used for audio and video, also on a voluntary basis. Let the market, broadcasters, and consumers decide. I think if both were allowed, the current ATSC system would be a great bridge between now and the day when mobile TV is really needed and we need to go to a more robust transmission scheme like ATSC 3.0.

Thank you for taking the time to review my comments.

Best regards,



Bill Sanford - CEO  
Lakeland Public Television



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