

high definition TV, including images with high spatial resolution, wide color gamut, high dynamic range and high frame rate as well as advanced audio systems to provide consumers with more vivid pictures and sound.

The robust new standard supports mobile viewing capabilities on ATSC 3.0-equipped devices such as smartphones and tablets or vehicular infotainment systems. Consumers will be able to watch their favorite broadcast shows, check the local weather, and tune in to breaking news from wherever they are on their tablet or smartphone. The new standard offers unprecedented personalization of broadcast television. Utilizing user-friendly tools, consumers will be able to choose alternate versions of the primary content that broadcasters air, including versions in other languages, as well as interact with related secondary content, such as social media posts and content offering a deeper dive into an issue covered by a news program or other show.

ATSC 3.0 has extensive capabilities to serve communities with important services. For example, a growing number of Americans (cord-cutters and cord-nevers) are relying on over-the-air reception as their only form of broadcasting content – particularly younger and minority viewers. The new standard will make signals more robust and reception more reliable. The resulting improved indoor and mobile reception will be of particular benefit for these consumers. The new standard will also benefit the hearing- and vision-impaired as it supports various accessibility advances including worldwide closed caption technology, and audio services including video description service and dialog enhancement. The hyper-localized advanced emergency alerting with the capability to deliver detailed information and rich media will especially benefit those living in areas prone to natural disasters such as hurricanes and tornadoes as well as areas which are targets of man-made threats. The new standard has the capability to

wake up devices in “sleep” mode to deliver time-sensitive, potentially life-saving emergency information. Finally, a key characteristic of ATSC 3.0 is its flexibility. The standard features a broad set of technical parameters allowing a wide range of potential services now and in the future.

II. Core ATSC 3.0 Standards Are Complete.

ATSC 3.0 is composed of a suite of 20-plus standards and recommended practices specifying various layers of the system, available publicly on ATSC’s website at www.atsc.org. In the NPRM, the Commission proposes to incorporate by reference into its rules one of these standards: A/321, Systems Discovery and Signaling. A/321 is one of two major components that make up the physical layer of the new transmission system; the other is A/322, the Physical Layer Protocol standard. These standards are finalized, along with a majority of the other standards and recommended practices that make up ATSC 3.0. Therefore, there is no reason to delay its adoption.

The process of finalizing this standard has been lengthy and careful. Planning and analysis work on ATSC 3.0 began in May 2010; standards development commenced in September 2011. In the ensuing six years, more than 30 specialist groups, subcommittees, and ad hoc groups actively engaged in development and testing each and every standard. Along the way, we have worked to ensure that the standards are as future-proof as possible. While work is still required to finalize several remaining standards, all core elements have been defined and completed. Currently, only one standard, which is optional, remains in the “Working Draft” phase. By the end of the summer, we expect all remaining standards to be approved.

ATSC 3.0 already has been used as the basis for the national standard in South Korea, and broadcasters are now on the air in the city of Seoul and vicinity. ATSC 3.0 receivers will be increasingly available in Korea this year in advance of 4K Ultra HD broadcasts of the Winter

Olympic Games in Korea next February. In the United States, ATSC 3.0 is on the air for testing under the Commission's experimental authority in a number of markets, including Baltimore, Cleveland, and Raleigh.

III. The ATSC Patent Policy Provides Assurance that Necessary IP will be Available for Deployment of ATSC 3.0.

As is the case with most major standards development organizations, the ATSC has long required holders of essential patents in ATSC standards to make those patents available on reasonable and non-discriminatory ("RAND") terms.² Patent statements must be filed by holders of patents that may be essential to an ATSC standard prior to a vote on the standard at issue, both to disclose the existence of the patent and commit to RAND licensing of the disclosed patent. Those patent statements are available to the public on the ATSC website.³ This policy, which is in line with best practices for patent policies in standards organizations globally, provides assurance that the underlying intellectual property necessary for ATSC 3.0 to be implemented will be broadly available to the industry.

IV. Conclusion

The ATSC 3.0 digital television standard has been carefully crafted over the course of the past seven years by a broad cross-section of the industry and promises significant improvements in the television ecosystem for the benefit of the American public. The ATSC urges the

² See ATSC, Patent Policy, http://atsc.org/wp-content/uploads/2016/06/B-4-2007-12-13_patent_policy_form_editable.pdf.

³ See ATSC, Patent Statements, <http://atsc.org/policies/patent-statements/>.

