



ATSC 3.0 Technology

Briefing

to the

GNC/VBV Broadband Task Force

May 23, 2019

What is ATSC 3.0?

- “Next Gen TV”
- A set of new standards for broadcast digital television to replace the current mandated standard, ATSC 1.0
- An optional technology transition for broadcasters
 - not mandated by the FCC, rather market driven
 - aligning TV strategy with the industry-driven approach of wireless broadband
- A forward thinking, Internet Protocol based architecture for television and broadcast data

The logo for ATSC 3.0 features the text "ATSC" in a bold, sans-serif font, with a stylized globe icon behind the letter "C". To the right of this icon, the number "3.0" is displayed in a larger, bold, sans-serif font.

Key new features of ATSC 3.0

1. Better picture
2. Audience measurement
3. Addressable content (audience targeting, personalization)
4. Immersive audio
5. Advanced Emergency Alerting
6. Mobility

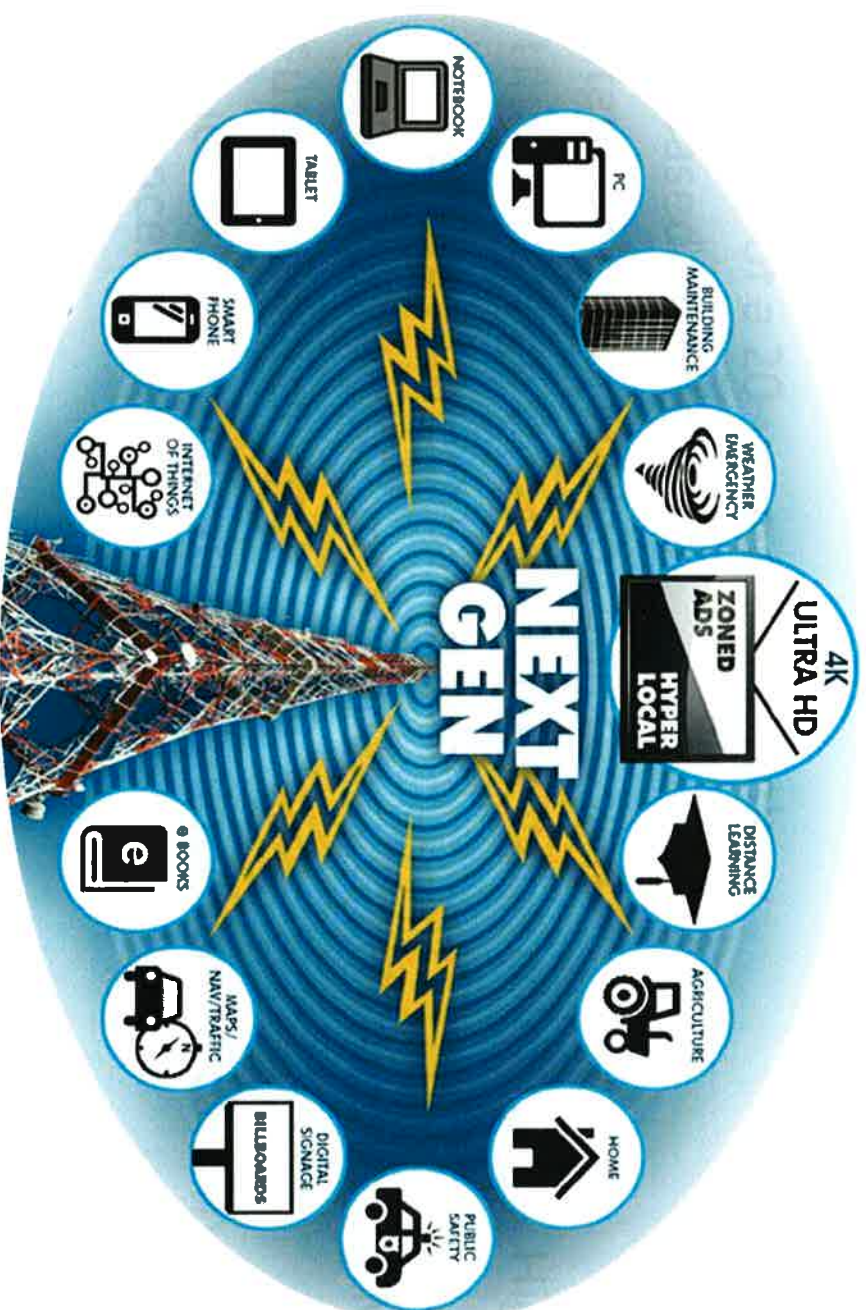


Plus...

- More data bandwidth, better efficiency, more services in 6 MHz channel (e.g., 10-12 HD channels and capacity for data services)
- Robust RF transmission = more viewers, more reach & devices
- Customization based on location / profile
- Seamless broadcast/broadband integration via IP
- IP-based datacasting
- Geo-targeted device “wake up” for emergency alerting
- Rich media emergency alerting content



Enabling New Broadband Broadcast Opportunities



Smart Cities and ATSC 3.0

- Key characteristics
 - High capacity with no congestion
 - Broad geographic reach
 - Low cost – rides on existing hardened infrastructure
- Example use cases
 - **Device control and updates** – use of the secure datacasting path to control, command, and update IoT devices in the field. E.g., synchronizing traffic signals, cameras, street lights, access gates, etc.
 - **Large event management** – targeted secure video, images, and support data to event management and control entities
 - **Public Safety, First Responder & Emergency response** – alerting, large file dissemination (e.g., blueprints, photos), tactical video
 - **School safety** – school camera targeted distribution, floor plans, student photos and identification
 - **Control of smart devices** – secure, rapid, and simultaneous control of IoT and infrastructure devices
 - **Public alert and warning** – severe weather, flooding, tornado alerting
 - **Digital signage** – for citizen inclusion and public engagement at city venues
 - **Critical customer notification** – for citizens who require more specialized notifications when an incident occurs



Patrick Butler

President and Chief Executive Officer

Email: pbutler@apts.org

Lonna Thompson

Executive Vice President, Chief Operating Officer and General Counsel

Email: lthompson@apts.org

Phone: 202-654-4215