ATSC 3.0 Update

Overview & International Deployments

Bits By the Bay, Chesapeake Beach, MD
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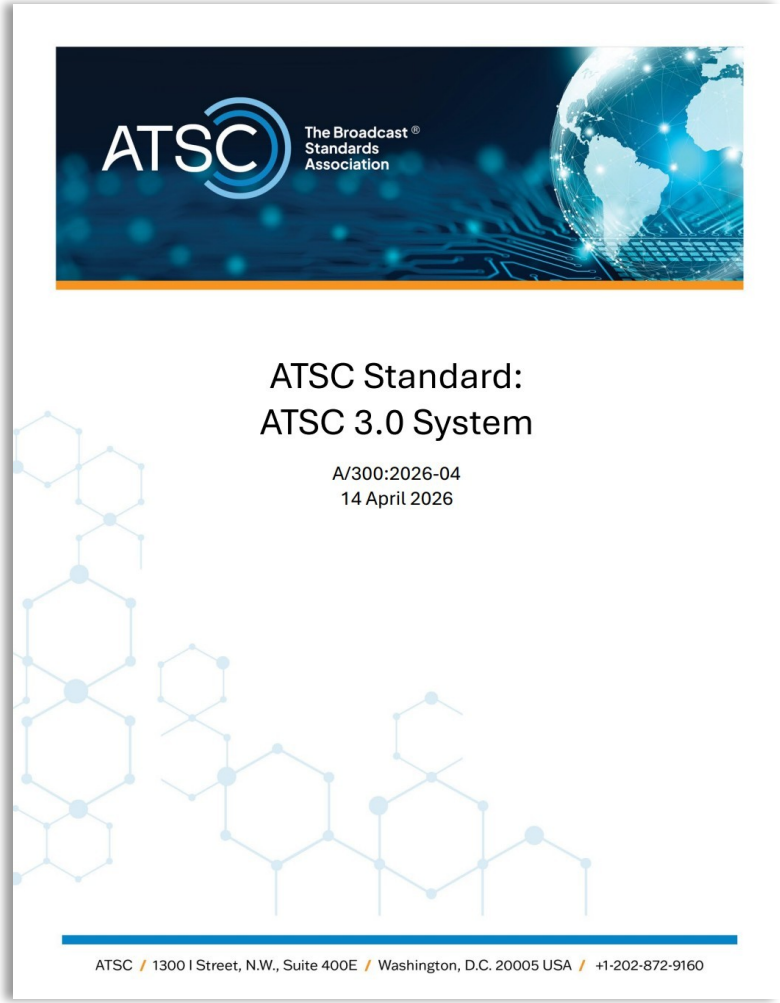
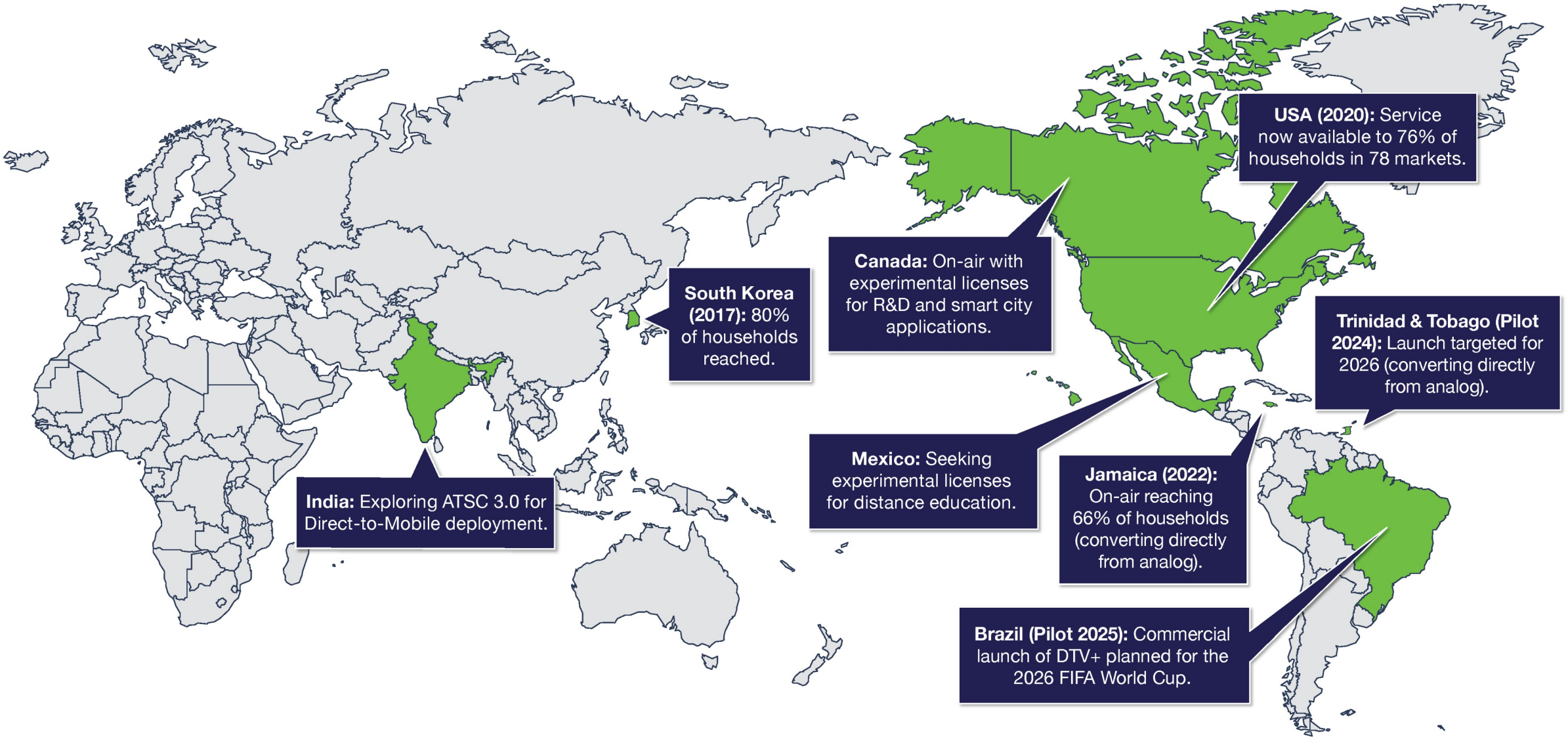
ATSC
The Broadcast ™ Standards Association

ATSC 3.0 Update – 2026

- 2026 ATSC 3.0 Suite published 14 April 2026
- New Annex in A/300 listing international variants
- New RP on “Delivery of ATSC 3.0 Services for Redistribution”
- New RP on “Use of Interactive Content”
- Numerous incremental refinements to PHY, Transport, Video, Audio, & Interactive elements
- Much work ongoing on future platform extensions “beyond TV”

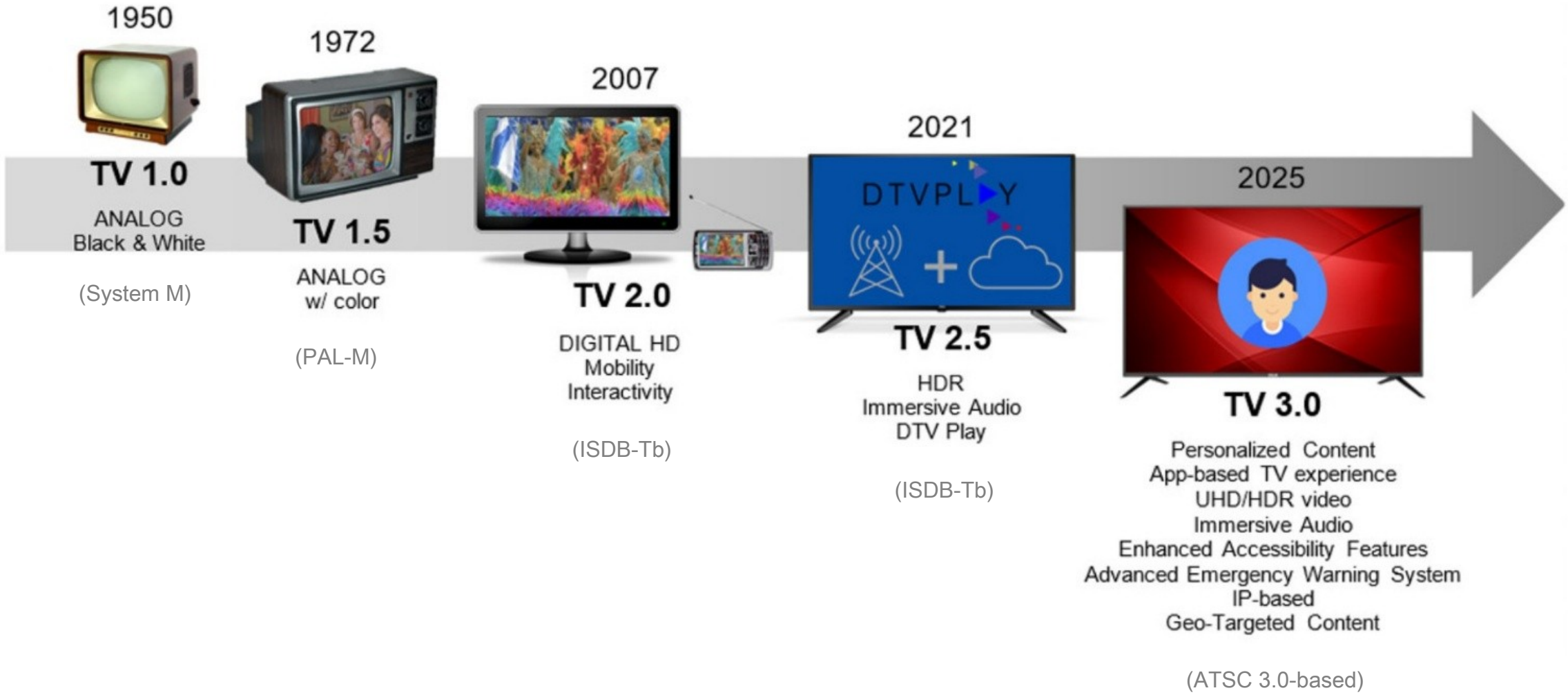


International Deployments



Brazil “TV 3.0”

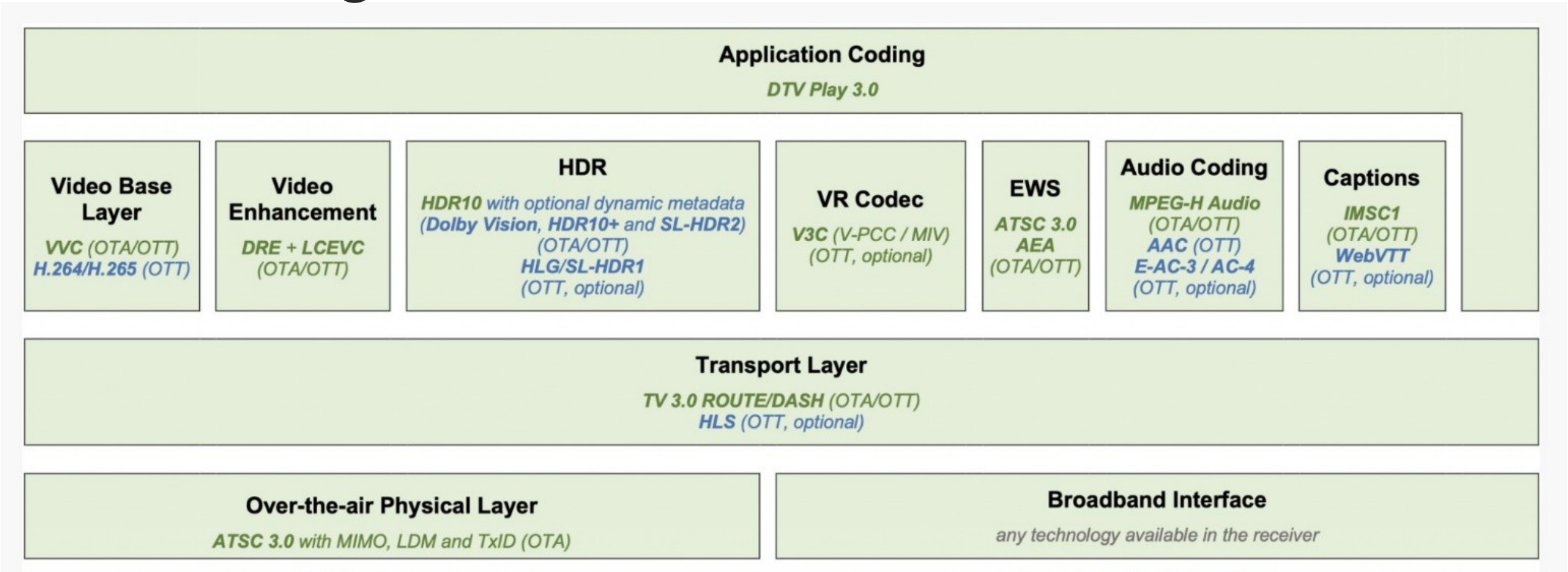
Terrestrial TV Evolution in Brazil (per *SBTVD Forum*)



Introduction to TV 3.0

- TV 3.0 is a recently released, next-generation terrestrial DTV broadcasting standard in Brazil
- It is largely a non-backward compatible system intended to provide state-of-the-art TV service to Brazilian TV audiences
- Brazil produces and consumes a remarkable amount of TV content, and the majority of viewing is via terrestrial FTA broadcast
- TV 3.0 is the latest and arguably most advanced incarnation of ATSC 3.0 technologies
- The Brazilian government adopted the TV 3.0 format in August 2025 with the consumer-facing branding of “DTV+”

Technologies Selected for TV 3.0



(Main technologies are shown in green text, with Complementary technologies in blue text.)

How TV 3.0 (mandatory OTA) differs from ATSC 3.0 in USA

- PHY Layer extensions: ***MIMO + LDM; TxID for end users***
- Transport Layer constraints and extensions: ***ROUTE/DASH only***
- Video: ***VVC + LCEVC***
- Audio: ***MPEG-H only***
- Closed Captioning: ***IMSC1***
- Emergency Warning: ***Based on ATSC 3.0 AEA***
- Closed Signing: ***Unique TV 3.0 spec***
- Application Coding: ***Unique TV 3.0 spec*** *(" DTV Play 3.0," ext. of TV 2.5)*
- Receivers: ***Unique TV 3.0 spec*** *(defines optional vs. mandatory elements)*

TV 3.0 Antenna Requirement and Spectrum Allocations

- Indoor MIMO receive antenna (internal or plug-in accessory) **must be included** with all receivers.
- Brazil will continue to use Hi-VHF (174 – 216 MHz) and UHF Channels 14 – **51** (470 – **698** MHz) for DTV.
- New “300 MHz Band” spectrum authorized for TV 3.0 (250 – 322 MHz)

Receiver Profiles and Form Factors

- 4K resolution @ 60 frames/second (minimum, mandatory)
- 4K resolution @ 120 frames/second
- 8K resolution @ 60 frames/second
- Video **Base Layer** is 4K60 plus HDR (no SDR)
- Initially all receivers will be 4K60 profile only
- Later, the upper profiles will provide higher spatial and temporal resolution via **Enhancement Layer**(s) atop 4K60 Base Layer
- Receiver form factors defined for “Built-in display receivers” (**BDR**), set-top box receivers (**STB**), and “Gateways” (**GTW**)
- All must support TV 2.x (SISO) and TV 3.0 (MIMO)
- GTW receivers must include at least 2 MIMO and 2 SISO tuners

Conclusions

- ATSC 3.0 flexibility and evolvability is applied in optimized regional deployments.
- ATSC's contributor community is broadly international in scope, and it continues to expand.
- Economic benefits from growing economies of scale are emerging, while the ability to tailor implementations to regional preferences and market requirements is preserved.
- A virtuous cycle of collaboration, refinement, and shared benefit is the result.