



# DTT Transition Retailers and Distributors



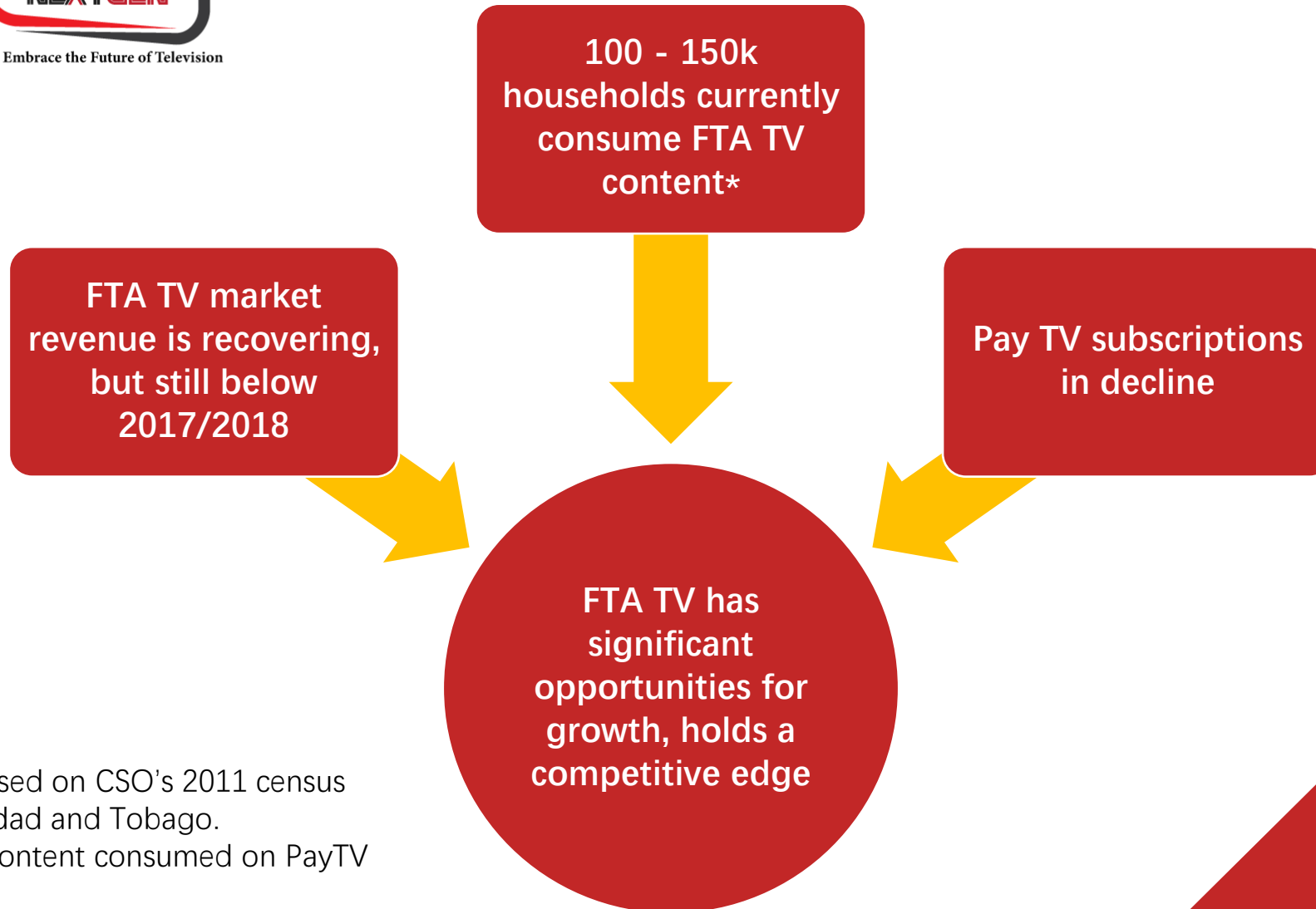
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**Digital Terrestrial Television  
Breakfast Meeting**

Friday 8<sup>th</sup> September 2023



# State of Analogue FTA TV Market



\* conservative estimate based on CSO's 2011 census  
~405k households in Trinidad and Tobago.  
Does not include FTA TV content consumed on PayTV





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# Transition to **DTT**

DTT is the technology used in the transmission and reception of free-to-air television signals in a digital format.

Analogue



Digital



SD only

FTA TV only

1 RF channel  
= 1 content  
channel



UHD

FTA TV +  
Enhanced  
Features

1 RF channel =  
multiple  
content  
channels



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# Benefits of DTT Adoption



## Reduced Costs

Estimated annual  
opex savings of  
TT\$1m+  
Spectrum, Electricity,  
Insurance, Repairs &  
Maintenance



## Increased Revenues

Datacasting  
Additional channel  
opportunities  
Education content  
delivery  
Disaster Relief  
5G integration



## Increased Quality

HD, 4K  
EPG  
Increased coverage  
On Demand  
Future-Proof



## ESG

Reduced energy  
consumption  
Safer RFR levels  
Bridging the digital  
divide






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# DTT Milestones

- DTT Framework established
- Notice of ATSC 3.0 Standard published
  - Developed in consultation with FTA broadcast TV industry gaining full consensus
- Industry Working Groups convened



The Telecommunications Act Chap. 47:31

## NOTICE

*Pursuant to section 45(2) of the Telecommunications Act*

**ADOPTION OF ADVANCED TELEVISION SYSTEMS COMMITTEE STANDARD VERSION 3.0 (ATSC 3.0) AS THE STANDARD FOR FREE-TO-AIR DIGITAL TERRESTRIAL TELEVISION (DTT) IN THE REPUBLIC OF TRINIDAD AND TOBAGO**

Pursuant to section 45(2) of the Telecommunications Act Chap. 47:31, the Telecommunications Authority of Trinidad and Tobago (the Authority) hereby notifies the public of its adoption of the Advanced Television Systems Committee digital television standard version 3.0 (ATSC 3.0) as the standard for free-to-air digital terrestrial television (DTT).

The adoption of the ATSC 3.0 standard is based on a requirement of the Authority's Framework for Digital Terrestrial Television Broadcasting (DTT Framework) which underwent two rounds of consultation.

The selection of ATSC 3.0 as the DTT standard included deliberations by the DTT Technical Working Group which comprised key stakeholders in the broadcast industry. The free-to-air television broadcast industry has therefore by consensus agreed to the adoption of ATSC 3.0 as the standard for DTT.

ATSC 3.0 is an advanced DTT standard that allows content to be delivered in up to 8K resolution and is based on Internet Protocol, thus, allowing modern entertainment experiences such as interactive viewing and datacasting services.

In March 2023, the Authority will recommence work with the broadcasting industry and other stakeholders to ensure a smooth transition to ATSC 3.0 by 2026. This will include ensuring ATSC 3.0 consumer devices are available in Trinidad and Tobago.

*Date: 18<sup>th</sup> January 2023.*



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# Global **ATSC 3.0** Developments

- **Deployments in the US cover 60% of viewing audience in over 70 markets as of August 2023**
  - Datacasting networks established in Denver, Detroit, Kansas City and Indianapolis by Scripps
- **Korea has achieved 70% ATSC 3.0 coverage and has identified ATSC 1.0 sunset in 2027 to support national innovation initiatives such as 5G MBMS, OTA Software updates and Enhanced GPS**
  - 9 out of 10 TVs sold in Korea support UHD using ATSC 3.0
- **Direct to Mobile (D2M) being actively trialled and rolled out in India for mobile traffic offload using ATSC 3.0**



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# Global **ATSC 3.0** Developments

- TVJ in Jamaica currently has 2 ATSC 3.0 transmitters operational, carrying 5 stations including TVJ's previously carried cable-only channels and Jamaica PBS
- Canada has experimental licence operational in Toronto supported by Humber's College Broadcast-Broadband Convergence (B2C) Lab
- 2 TV broadcasters in Mexico have applied for ATSC 3.0 experimental licences
- Formation of Implementation Team 7 by ATSC to support the Caribbean



# DTT Ecosystem Update



**Hisense**



**SAMSUNG**

**SONY**

- 41 ATSC 3.0 TV models available at August 2023
  - Hisense (3), LG (6), Samsung (18), Sony (14)
- ATSC 3.0 Receivers available from US\$100

<https://www.watchnextgentv.com/shop/>







# ATSC 3.0 Receiver Specifications

- Support for ATSC 3.0 tuners in full TVs
- Nextgen certified (Ideally)
- STBs available for existing TVs that do not support ATSC 3.0





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# DTT Transition Path

World Cup 2026



NTSC/Analog

ATSC 3.0

2025

2026

- Ubiquity of ATSC 3.0 receiver ecosystem from 2023 to 2026 to enable Analog Switch-Off



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# Additional **DTT** Information

- TATT's website - [www.tatt.org.tt/dtt.aspx](http://www.tatt.org.tt/dtt.aspx)
- ATSC website – <https://www.atsc.org/nextgen-tv/>
- Nextgen TV website - <https://www.watchnextgentv.com/>

TELECOMMUNICATIONS AUTHORITY  
of Trinidad & Tobago

Homepage | TATT Goes Digital | Consumers | Reports/Prices | Consultative Docs | Complaints | Licensing | Universal Service

## DTT

<b>DTT Home</b>	Digital Terrestrial Television (DTT)
<b>DTT Framework</b>	The Telecommunications Authority of Trinidad and Tobago is pleased to inform the public that the implementation of digital terrestrial television (DTT) in Trinidad and Tobago has formally commenced.
<b>Industry Presentations on DTT</b>	
<b>DTT Consumer Devices</b>	
<b>DTT ATSC 3.0 Notice</b>	
<b>Other Useful Resources</b>	

Free To Air (FTA) television broadcasting is an important medium for the dissemination of information to the public, as it is freely accessible. The transition of FTA television to digital will bring enhanced quality service to consumer including up to 4K resolution video, access to electronic programming guides and interactive viewing. On 18th January 2023, the Authority published a notice of the adoption of the Advanced Television Systems Committee Standard Version 3.0 (ATSC 3.0) by the FTA broadcast industry as the standard for free-to-air (FTA) DTT in Trinidad and Tobago. ATSC 3.0 allows datacasting, which is a data delivery system for the transmission of data to an infinite number of devices, for use cases such as E-learning. ATSC 3.0 also has an advanced emergency alert feature which allows broadcasters to send information on emergencies to target receivers, including a wake-up signal to power-on receivers in stand-by mode. FTA television coverage will improve with the transition to digital, as broadcasters will have access to the ability to deploy single frequency networks.



# The Way Forward

- TATT to share with retailers and distributors information on supported television sets by 11<sup>th</sup> September 2023
- Retailers to liaise with their suppliers to determine whether sets are available
- Retailers to provide feedback to TATT by 29<sup>th</sup> September on any challenges with sourcing ATSC 3.0 televisions
- If none, retailers to provide feedback as to when ATSC 3.0 television sets will be available in market and on shelves
  - Once timing confirmed, TATT to support with customer education and information on the benefits
- The Authority intends to have 10,000 receivers sold in market by launch of ATSC 3.0 in July 2025 of market size of 100,000 households





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