

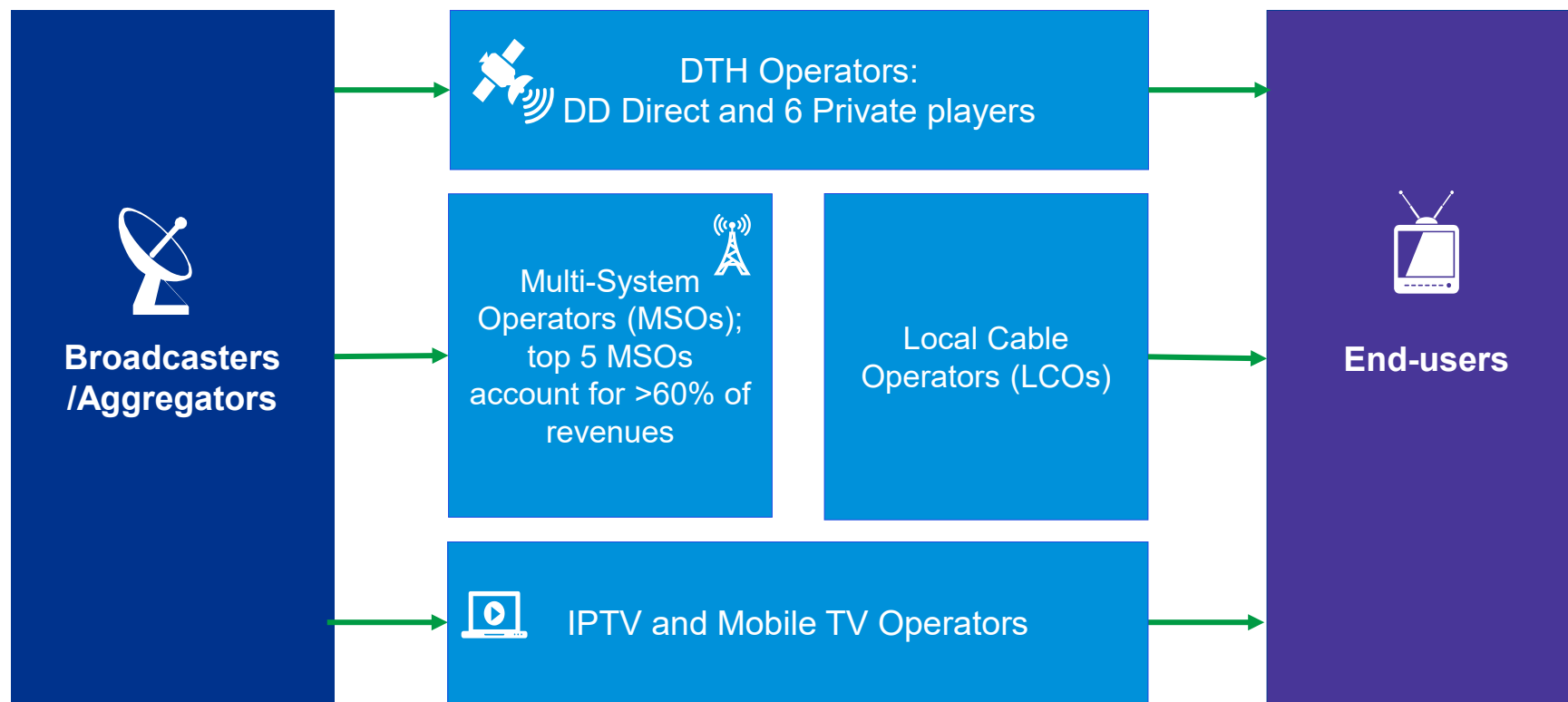


# Digital Addressable Systems Audits

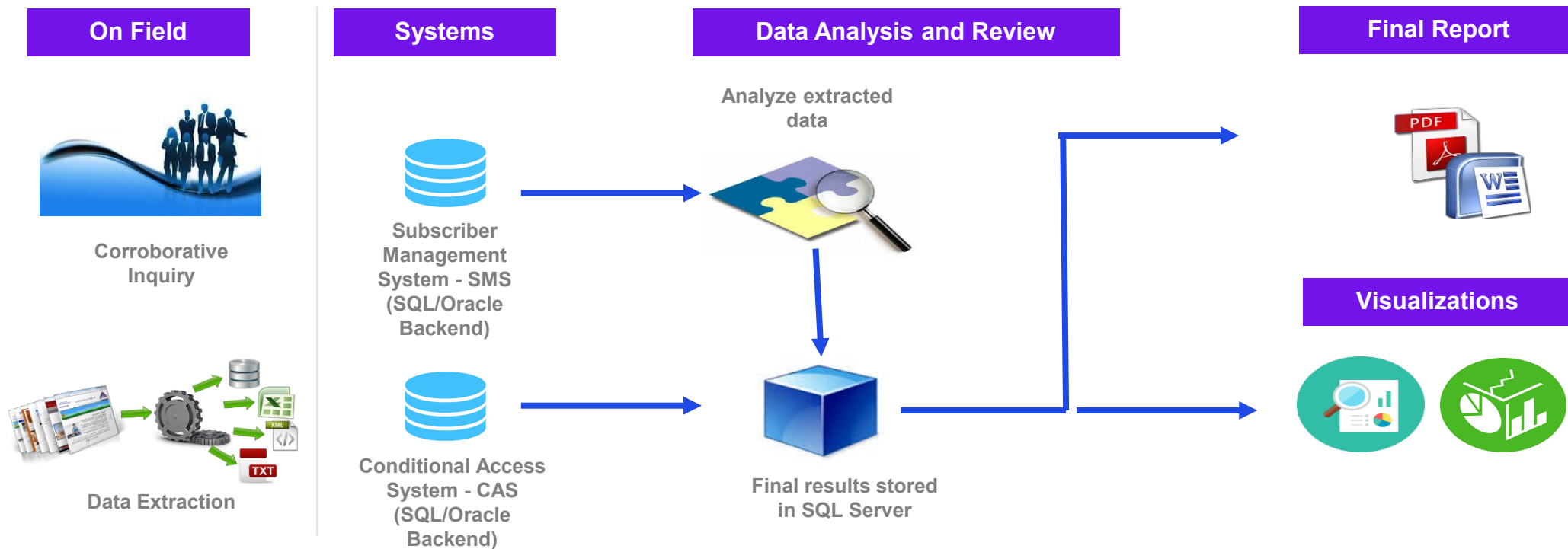
August 2025



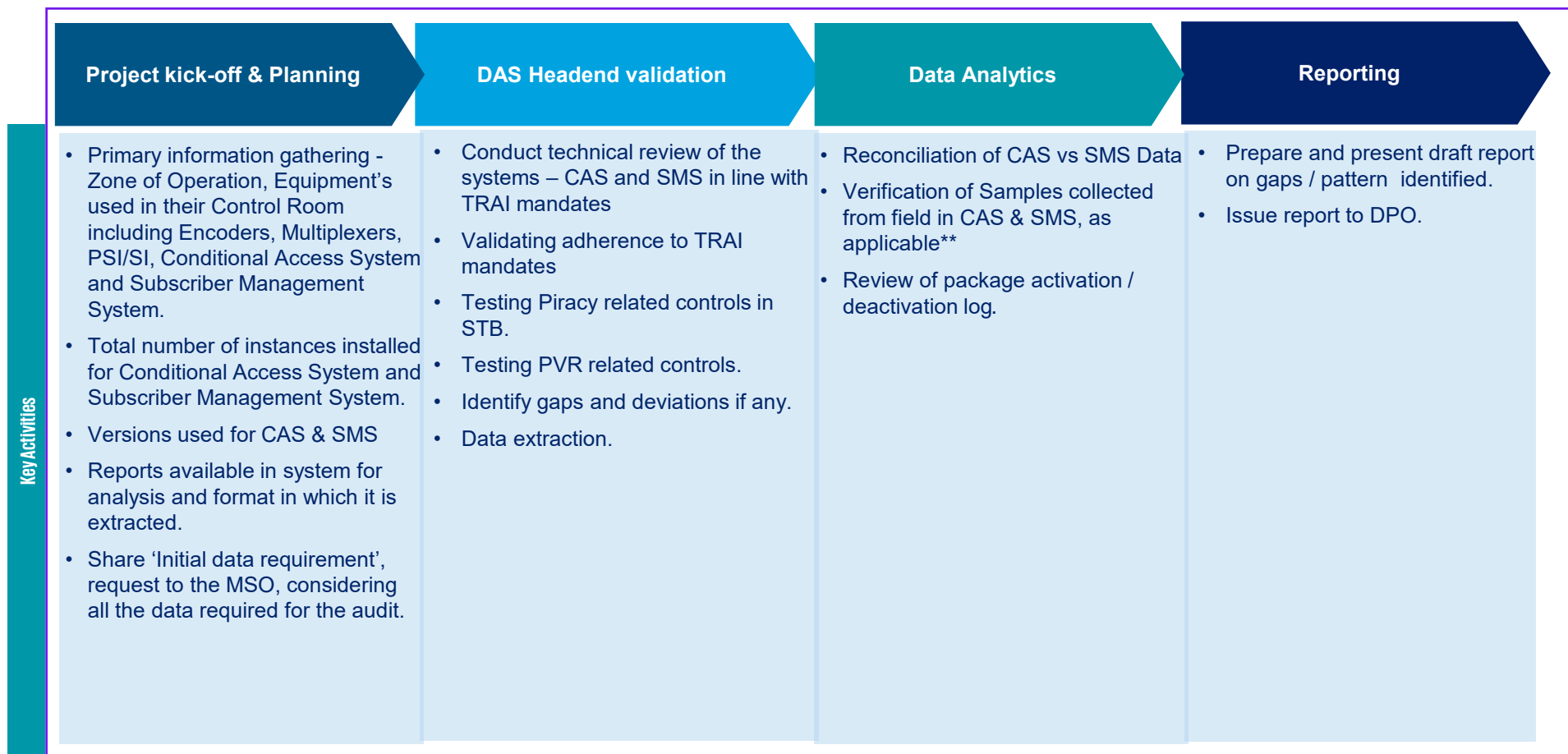
# Broadcasting Infrastructure



# Our Approach & Methodology- Overview



# Our Approach & Methodology- Overview

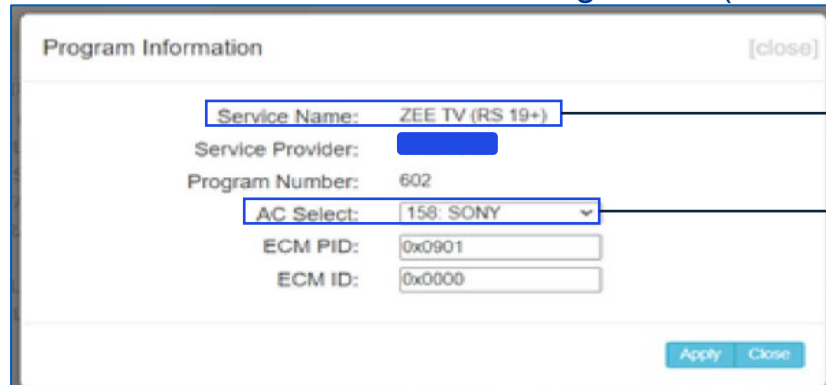


**\*\*Samples from the field shall be shared by the broadcaster**

# CATV/HITS/DTH DAS Headend Validation

## Step 1: Detailed headend Walkthrough

- Broadcaster IRD validation.
- Multiplexer/Scrambler/QAM Configuration validation.
- 4.5) Check MUX configuration to validate number of Transport Streams ("TS") configured with SID, scrambling status of each SID and ECM and EMM configuration (MUX-TS Stream-No. of ECM & EMM configured)



Program Information [close]

Service Name: ZEE TV (RS 19+)

Service Provider: [redacted]

Program Number: 602

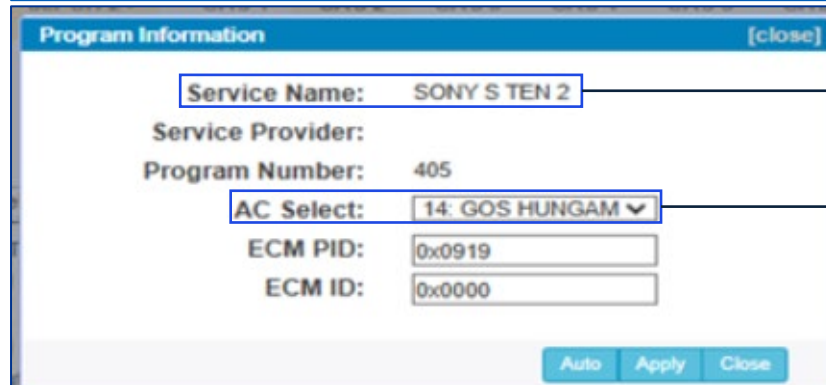
AC Select: 158: SONY

ECM PID: 0x0901

ECM ID: 0x0000

Apply Close

Attached Screenshot highlights  
ZEE TV is getting Scrambled With  
the Access Criteria of SONY TV



Program Information [close]

Service Name: SONY S TEN 2

Service Provider: [redacted]

Program Number: 405

AC Select: 14: GOS HUNGAM

ECM PID: 0x0919

ECM ID: 0x0000

Auto Apply Close

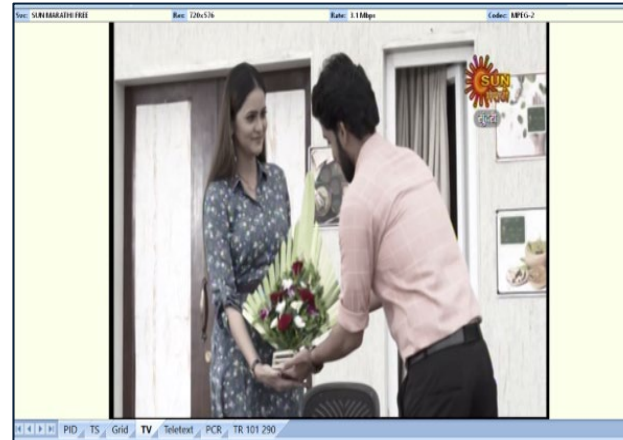
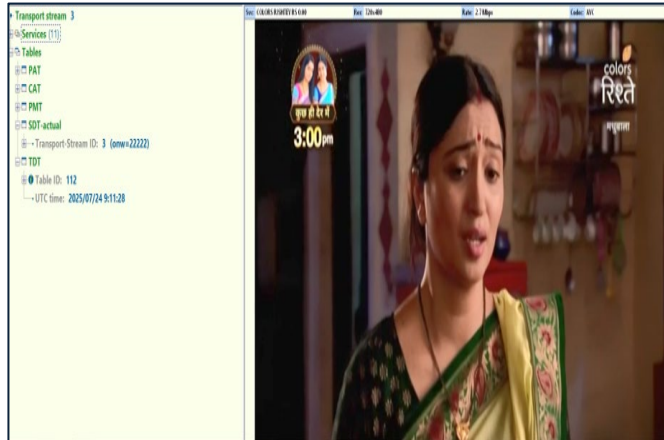
Attached Screenshot highlights  
SONY Ten 2 is getting Scrambled  
With the Access Criteria of Hungama



# CATV/HITS/DTH DAS Headend Validation

## Step 1: Detailed headend Walkthrough

- TS Recording



# CATV/HITS/DTH DAS Headend Validation

## Step 1: Detailed headend Walkthrough

Validation of CAS and SMS servers physical instances and IP address.

## Step 2: Simulation Testing on all types of STB's deployed by DPO.

Simulation Testing at least on 1 STB of each model deployed in DPO network as per the procedure to be followed for inspection of Schedule III of Interconnection Regulations 2017 Compliance and subsequent amendments if any.

## Step 3: Data extraction from all the CAS and SMS servers disclosed by DPO.

1. Improper audit trail: Lack of logs for STB provisioning, package modifications, Channel Renaming.

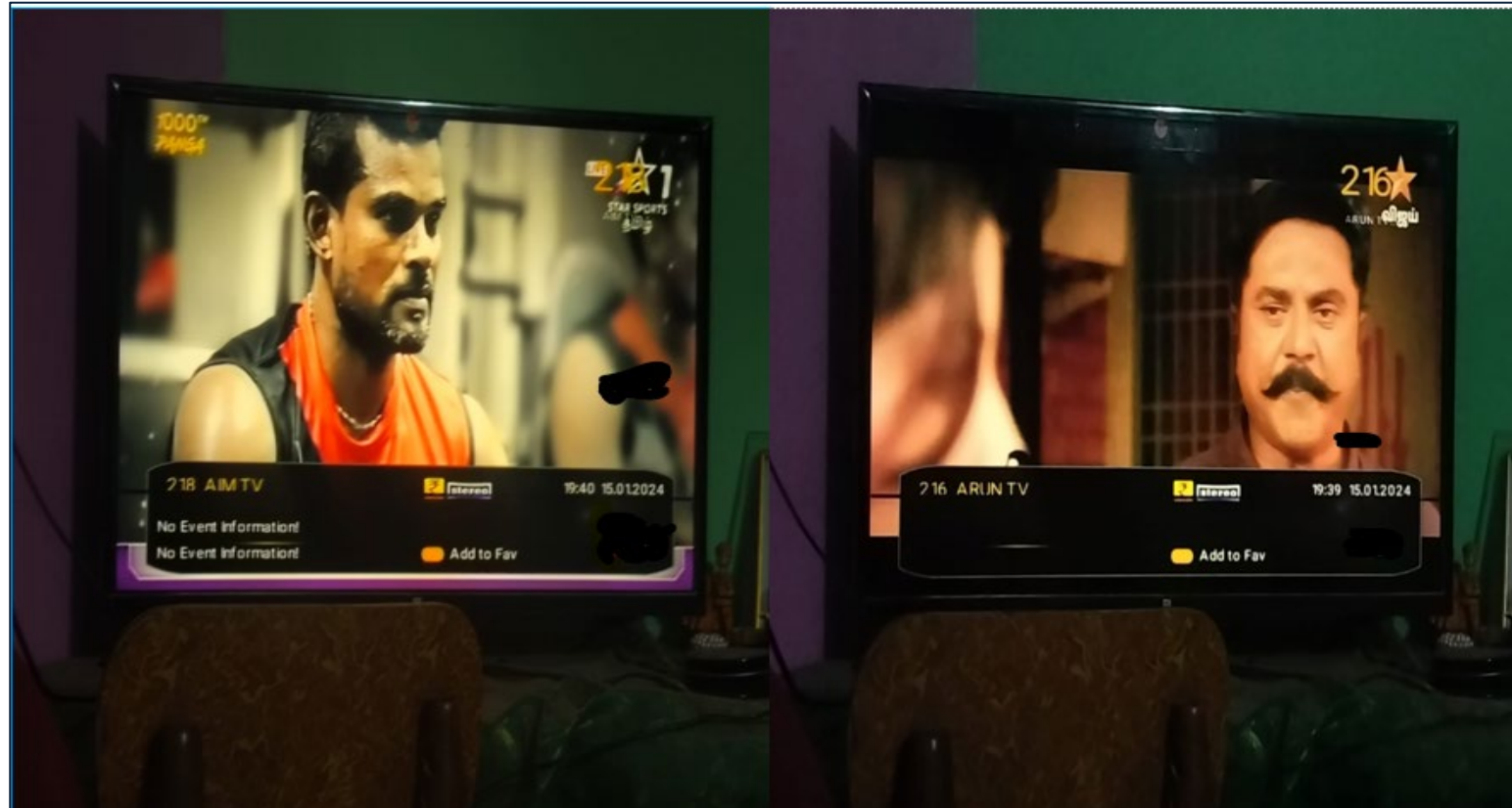
PNAME	PRODUCT_ID	SERVICE_NAME	STATUS	STATUS_TIME	PRODUCT_TY
Star Sports2 Hindi HD	228	Star Sports2 Hindi HD	Added	4/27/2022 14:48	ALACARTE
Star Sports2 Hindi HD	228	Star Sports2 Hindi HD	Removed	3/21/2025 7:31	ALACARTE
Star Sports2 Hindi HD	228	Star Sports2 Hindi HD	Added	3/21/2025 7:31	ALACARTE

Star Sports 2 Hindi HD was launched on March 15, 2025. However, the image above clearly shows that changes made today are also affecting historical data.

# CATV/HITS/DTH DAS Headend Validation

## Step 3: Data extraction from all the CAS and SMS servers disclosed by DPO.

Risk of Transmitting paid Channels as FTA.





# CATV/HITS/DTH DAS Headend Validation

## Step 3: Data extraction from all the CAS and SMS servers disclosed by DPO.

### 1. Data Integrity and Accuracy Issues

- a) Incomplete subscriber data: Many systems lack accurate subscriber-level data.
- b) Non-compliant CAS & SMS systems: Some Conditional Access Systems (CAS) or Subscriber Management Systems (SMS) don't meet TRAI's data reporting standards.

Total Active VC Count: 11232

Create Time:2025-07-29 16:14:47

Report Time:2025-07-29 16:14:48

Query Deadline:2025-07-07 23:59:59

Total Active VC Count: 17963

Create Time:2025-07-30 17:48:13

Report Time:2025-07-30 17:48:13

Query Deadline:2025-07-07 23:59:59

$17,693 - 11,232 = 6,731$ .

**Snapshot 1 highlights data extracted on 29th July 2025 for total active subscribers on 7<sup>th</sup> July 2025 which is 11,232.**

**On 30<sup>th</sup> July 2025 same data was extracted From the same system for the same date, However additional 6,731 subscriber were Available in the report.**

# CATV/HITS/DTH DAS Audit

**Step 4 :Analysing the Data extracted during the DAS audit field activity.**

**Step 5 :Sharing Draft report with DPO for their comments on the observations highlighted in the Draft report.**

**Step 6 : Sharing final report with DPO if the audit is caused by DPO and if it's a broadcaster caused audit releasing the final report to DPO and Broadcaster.**

# **IPTV DAS Audit**

## **Issues faced during IPTV Audits.**

- 1. Unavailability of Audit Manual.**
- 2. Definition of middleware.**
- 3. Definition of Forensic Watermarking.**

# Thank You

