



**CONSULTATION PAPER ON “THE TELECOMMUNICATION (BROADCASTING AND CABLE)
SERVICES DIGITAL ADDRESSABLE SYSTEMS AUDIT MANUAL” ISSUED BY THE TELECOM
REGULATORY AUTHORITY OF INDIA DATED MARCH 29, 2019**

**TO
THE TELECOM REGULATORY AUTHORITY OF INDIA**

**FOR AND ON BEHALF OF
INDIAN BROADCASTING FOUNDATION**

Dated: 13th May 2019

Pursuant to the ruling of the Supreme Court dated October 30, 2018 in Civil Appeal No. 7326 and 7327 of 2018 in the matter between Star India Pvt. Ltd. vs. Department of Industrial Policy and Promotion & Ors., the Telecom Regulatory Authority of India (TRAI) had notified the Telecommunications (Broadcasting & Cable) Services Interconnection (Addressable Systems) Regulations, 2017 ("**Regulations**"), The Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017 and the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017 (collectively "**MRP Regime**"). The New MRP Regime was to be implemented in terms of the timelines prescribed by TRAI vide its Press Release No 71/ 2018 dated 3rd July, 2018 however, an extension vide direction bearing no. F.No.21-4/2018-B&Cs dated December 27, 2018 ("**Direction**") was granted by TRAI. In terms of the Direction, the MRP Regime has been implemented effective January 31, 2019.

The distribution industry has witnessed a paradigm shift from the previous 'fixed fee' regime to the 'MRP' model. In the present MRP Regime, since broadcasters' business are dependant directly on the subscriber numbers of the operators, audit becomes a critical aspect to ensure that broadcasters are able to receive their legal dues in consideration of having provided signals of their channels to the operators. This makes it imperative to have a uniform audit manual in place to ensure that transparent methodologies are deployed to arrive at accurate outcome pursuant to audit.

We thank the TRAI for initiating consultation by way of issuing the Consultation Paper on The Telecommunication (Broadcasting and Cable) Services Digital Addressable Systems Audit Manual ("**Consultation Paper**").

I. **ISSUES**

Scope of audit

Query 1:

Whether it should be mandatory for every DPO to notify the broadcasters (whose channels are being carried by the DPO) for every change made in the addressable system (CAS, SMS and other related systems)?

Response 1:

Yes, it should be mandatory for every DPO to notify the broadcasters for every change made in the addressable system (CAS, SMS and other related systems). The following has already been prescribed in Schedule III of the Regulations".

“The distributor of television channels shall declare the details of the CAS and the SMS deployed for distribution of channels. In case of deployment of any additional CAS/ SMS, the same should be notified to the broadcasters by the distributor.”

Since CAS, SMS and other related systems are important components of the addressable systems and also they directly impact the revenues of all the stake holders in the chain, the DPOs should mandatorily inform the broadcasters of the changes that would have been made in the addressable systems within 7 days in writing. This would further tighten the provision already provided under the Regulations.

Further, it is critical that not only the hardware changes, but also the software changes made if any, is notified to the broadcasters. Care should be taken while replacing the existing data servers (CAS/ SMS) to protect the historical data of the old addressable system. Replacement cannot be excuse for the data loss. As per the Regulations, last 24 months’ data along with all logs to be preserved.

Query 2:

Whether the Laptop is to be necessarily provided by the Auditee DPO or the Audit Agency may also provide the Laptop? Please provide reasons for your comment.

Response 2:

We believe the Audit Agency should be given free hand in deployment of processes/analysis and should have the ability to use their own Laptop with all the software for the purpose. Audit firms have developed tools to recalculate the correct subscriber base which will not only improve accuracy of Audit analysis but also reduce time for completion of Audit. Empanelled Auditor is bound by the Regulations and we believe under their Agreement with TRAI to ensure audit process is accurately conducted. Any mischief regarding the data handling can entail severe consequences including termination of services.

After completion of the audit, the DPO in any case, can check and retain the personal data (specific to DPO) and allow the auditor to have the data which is required for analysis.

Query 3:

Whether the Configuration of Laptop vide Annexure 1 is suitable? If not, please provide alternate configuration with reasons thereof.

Response 3:

The Laptop configuration detailed in the Annexure 1 fulfills the requirement for the audit exercise.

Query 4:

Do you agree with the provisions regarding seeking of TS recording and ground sample information from IBF/ NBA for verification/ checking by the Auditor?

Response 4:

Yes, we agree and recommend the provisions regarding seeking of TS Recordings and ground sample information from IBF/ NBA for verification/ checking by the Auditor. This is on account of the following reasons:

- Content security and correct declaration is of utmost priority for broadcasters. Aim of this Audit exercise is to find correct subscriber reporting and not just validation of systems, To ensure the same, TS recordings and field sample information plays an important role.
- We agree that, DPO should inform IBF and NBA the date on which the audit will be conducted at least 10 days in advance. This will ensure that the required TS recordings and field samples can be arranged from the network and can be handed over to the Auditor

We also recommend that screen shots and the field sample information should be part of the final audit report.

In reference to the footnote number 17 on page 35 of the consultation paper, it is mentioned that “DPO to notify IBF/ NBA of proposed audit at least 10 days prior to the Audit. IBF/ NBA may provide sample data of not more than 100 such STB/ VCs”. We are of a firm opinion that the sample of 100 is very small and does not provide enough inputs for a meaningful Audit. The size of a representative sample should be large enough to represent the following attributes

- i. Each Channel being carried by DPO
- ii. Each City/Area of Operation (Example Andheri, Worli, Palwal etc)
- iii. Each STB type of DPO
- iv. Each CAS deployed by the DPO
- v. Each month under audit

In our view sample size cannot be less than 500 for each audit exercise for an audit period of around one year, however for smaller DPO having presence in single city, IBF/NBA would restrict itself to a lesser sample size. Since field samples do not add to any cost to the DPO, nor considering them in comparative analysis increases the timelines of Audit as such there is no merit in restricting sample size to 100.

Query 5:

Do you agree that Data Dump may be cross-checked with weekly data of sample weeks basis? If yes, do you agree with checking of random 20 % sample weeks? Please support your comments with justification and statistical information.

Response 5:

No, we are of the opinion that the data dump should be cross checked with 100% data derived from the system for all the weeks of the review period. For active/de-active STB and VC details with city/ state from both CAS/SMS should be extracted not as month-end data, but it should be for 7th, 14th, 21st and 28th of all the audit purview months consistent with the Regulations. Further, channels should package mapping along with service ID (with creation, modification and discontinue date) from SMS and CAS. This feature is the most critical since it gives the auditor the logs of all the channel creations, modifications done during the period of review.

Declaration from the DPOs on lack of system capability is not acceptable. Raw data or data dumps should be extracted from both the systems (CAS/SMS) for entire review period and it should also give the flexibility to check on given dates (7th, 14th, 21st and 28th of the month).

Also, auditors should have the ability to cross check the extracted data from both the systems - CAS/ SMS for entire review period and it shouldn't be restricted to 20%.

Query 6:

Do you agree with the proposed Data extraction methodology? If not, suggest alternates with reasoning thereof.

Response 6:

Broadly we agree with the methodology. However, following aspects need to be reviewed:

- Data logs extractions should take place in the presence of the auditor;
- Data logs for the audit period should be extracted from the server and there should not be option of re-creation of logs using tools;
- As mentioned in the Response 5, extraction can't be month end active, de-active STB/ VC, instead it should be taken on a weekly basis (7/14/21/28);
- Channel to package mapping with service ID should have modification, creation and discontinuation date, time stamps. This feature is non-negotiable and it cannot be replaced with the letter from the DPO.

As per foot note number 8 “As per system capability. In case the system does not allow such information, then DPO to provide an undertaking to this effect”. As stated earlier in this document, the subscription count for a channel is dependent on the following two factors

1. Subscriber base of the DPO
2. Channels subscribed by the subscriber/viewer.

Auditor will have to recreate/re-establish the subscriber number of a channel by checking

1. The pack configuration i.e. Package channel mapping
2. The changes (additions/deletions) done in the pack
3. The effective date of changes done in the packs.

In absence of such information about the above changes done to the packages/packs, rogue DPO may change/alter the channel package mapping before report generation to masquerade the under reporting as in fact true and factual subscription. These changes will never be traceable during Audits if no logs are maintained in the systems or if these logs are not made available to the auditors.

If authority is of opinion that there are technical challenges in the DPO's systems, in such cases a time window of 60 days may be given to the DPOs to get their CAS and SMS updated.

As per foot note number 9 “Raw data or data dumps for at least 20 % of the weeks (random Sampling basis) during the audit period. The Broadcasters' report to be regenerated based on this data and compared with the actual reports submitted/sent to the broadcasters”

Response same as provided for Q-5

As per foot note number 10 “During the first recorded audit all logs to be provided for preparing a first-time reference document. “

Ideally all logs should be provided from the start of operations of the DPO (or the date of deployment/operationalization of the addressable systems, as the case maybe) or else the Auditor shall have to rebase his analysis for a given audit duration, on the start and the end dates of a previous audit engagement, by a different auditor/Audit firm.

If all logs are not feasible from sizing perspective, then logs should be provided from start of operations

OR

at least from 28/12/2018

OR

2 years from Audit start date (whichever is older).

In this case logs provided during first recorded audit should be preserved to serve as a reference for subsequent audits.

As per foot note number 12- In cases where data logs for the audit period are not available on live systems and old data is stored in back-up storage. In such cases, the data logs may be re-created using extraction tools from such back-up.

This is not acceptable as logs can never be recreated, even the schedule III of the regulations maintains that logs should be uneditable.

However, it is possible that logs are stored in archive but in such cases, logs should be archived in such a way that DPO is not able to access the storage space to undertake any changes or access trail is captured securely. , Even the CAS vendor should not be able to edit such logs and these logs should be time and date stamped for activities such as rewriting or archiving .

On page 36 the following paragh needs to eb changed from “p) All cases to be reported after analysing logs of MUX/Scramblers whenever there were signals running in unencrypted mode during the Audit period” to “p) All cases to be reported after analyzing logs of MUX/Scramblers”.

Query 7:

Do you agree with verification and reporting of City-wise, State-wise and Head-end wise subscription report? Please provide supporting reasons/ information for your comment.

Response 7:

Yes, we agree with verification and reporting of city-wise, state-wise and head-end wise subscription report. This is on account of the following reasons:

- It gives clarity and transparency in the system;
- It is handy in analyzing the channel-wise penetration;
- Marketing becomes more focused;
- It ensures win-win situation for both the stake-holders;
- It helps in incentive schemes which broadcasters come up with from time to time;
- Over and above all of the above, it would enhance the trust factor amongst the players.

Query 8:

Do you agree with the tests and procedure provided for checking covert and overt fingerprinting? Provide your comments with reasons thereof?

Response 8:

It is a known factor that piracy is a major menace in broadcasting/distribution field and to tackle it, all available tools should be implemented into the system. One such tool is covert FP. There are many types of covert FPs available depending upon the make of CAS. Some are not visible to bare eyes and can be accessed through recordings. Other types are representation of VC numbers in Hexa decimal formats blinking for shorter period of time (may be for fraction of sec).

The test and procedure laid down for checking covert and overt FP gives us additional power to detect piracy and stop the same.

Further, the tests and procedures provided for checking overt and covert are in line with what is expected.

We are of the opinion that any piracy can result in losses for both broadcasters and the DPOs, so working towards eliminating such activities should be undertaken collectively.

Query 9:

Any other suggestion/ comments on the provisions of the Audit Manual.

Response 9:

The Audit Report format needs to be re-looked. We have attached herewith our suggestions on the Audit Report format.

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