



Telecom Regulatory Authority of India



Draft

**THE TELECOMMUNICATION (BROADCASTING AND
CABLE) SERVICES
INTERCONNECTION (ADDRESSABLE SYSTEMS)
(SEVENTH AMENDMENT)
REGULATIONS, 2025**

22 September 2025

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Written comments on the draft Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Seventh Amendment) Regulations, 2025 are invited from the stakeholders by 06.10.2025. Please support your comments with detailed reasons and justifications. The comments will be posted on TRAI's website www.trai.gov.in.

The comments may be sent, preferably in electronic form to Dr. Deepali Sharma, Advisor (B&CS) and Ms. Sapna Sharma, Joint Advisor (B&CS), Telecom Regulatory Authority of India on advbcs-2@traai.gov.in and jtadv-bcs@traai.gov.in . For any clarification/information, please contact Dr. Deepali Sharma, Advisor (B&CS) or Ms. Sapna Sharma, Joint Advisor (B&CS) at Tel. No.: +91-11-20907774 or +91-11-26701418.

Draft

**TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY,
PART III, SECTION 4
TELECOM REGULATORY AUTHORITY OF INDIA
NOTIFICATION**

**THE TELECOMMUNICATION (BROADCASTING AND CABLE)
SERVICES
INTERCONNECTION (ADDRESSABLE SYSTEMS) (SEVENTH
AMENDMENT)
REGULATIONS, 2025
(__ of 2025)**

New Delhi, __/__/2025

F. No. RG-1/1/(1)/2025-B AND CS(2).— In exercise of the powers conferred by section 36, read with sub-clauses (ii), (iii) and (iv) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997 (24 of 1997), read with notification of the Central Government, in the Ministry of Communication and Information Technology (Department of Telecommunications), No. 39, —

(a) issued, in exercise of the powers conferred upon the Central Government under clause (d) of sub-section (1) of section 11 and proviso to clause (k) of sub-section (1) of section 2 of the said Act, and

(b) published under notification No. S.O.44 (E) and 45 (E) dated the 9th January 2004 in the Gazette of India, Extraordinary, Part II, Section 3, —

the Telecom Regulatory Authority of India hereby makes the following regulations further to amend the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 (1 of 2017), namely: -

1. (1) These regulations may be called the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Seventh Amendment) Regulations, 2025 (__ of 2025).
- (2) These regulations shall apply throughout the territory of India.
- (3) They shall come into force from the 1st April 2026.
2. In regulation 15 of the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 (hereinafter referred to as “principal regulations”), --

(a) for sub-regulation (1), the following sub-regulation shall be substituted, namely: -

“(1) Every distributor of television channels shall get its addressable system of distribution platform, such as subscriber management system (SMS), conditional access system (CAS), digital rights management (DRM) system, and other related systems audited once every year, for the preceding financial year, by an auditor to verify the information contained in the monthly subscription reports made available by the distributor to the broadcasters, and the distributor shall take all necessary measures in advance to ensure that the audit report for the preceding financial year is shared with broadcasters, with whom it has entered into interconnection agreements, by the 30th September every year:

Provided that the Authority may empanel auditors for the purpose of such audit and it shall be mandatory for every distributor of television channels to get the audit conducted, under this sub-regulation, from M/s Broadcast Engineering Consultants India Limited, or any of such empanelled auditors:

Provided further that the distributor shall inform the broadcaster, with whom it has entered into an interconnection agreement, at least thirty days in advance, the schedule of audit and the name of the auditor:

Provided also that the broadcaster may depute one representative to attend the audit and share inputs of the broadcaster for verification during the audit process and the distributor shall permit such representative to attend the audit

Explanation: For removal of doubt, it is clarified that the presence of the representative of the broadcaster is for the limited purpose of sharing inputs, if any, for verification, during the audit process, and does not confer any authority upon him to direct or influence in any manner the conduct of the audit:

Provided also that it shall be optional for distributors of television channels, whose active number of subscribers, on the last day of the preceding financial year, do not exceed thirty thousand, to get the audit conducted under this regulation:

Provided also that the empanelled auditor or M/s Broadcast Engineering Consultants India Limited, conducting the audit of the addressable systems, shall furnish the audit report along with an audit certificate to the distributor confirming that the auditor is independent of the auditee and that the audit was conducted in accordance with the provision of the regulations, and the auditor shall also furnish such other information or certification as may be specified by the Authority from time to time:

Provided also that after coming into effect of these regulations, the unaudited period, if any, preceding to the financial year for which the audit is being conducted, shall also be included in the audit.”

(b) in sub-regulation (1A), for the word “calendar”, the word “financial” shall be substituted;

(c) for sub-regulation (2), the following sub-regulation shall be substituted, namely:-

“(2) (a) In case a broadcaster has received the audit report by the due date of 30th September under sub-regulation (1) and finds discrepancy in such audit report, it may point out the same, in writing, to the distributor of television channel from whom the audit report has been received, citing specific observations with evidence against audit report, within thirty days of receipt of audit report, and may provide a copy of the observations with evidence to the concerned auditor:

Provided that the distributor, on receiving observations from broadcaster shall refer the same to the auditor concerned, within seven days of its receipt, to examine and address the observation and the auditor shall address the observations of the broadcaster and provide its updated audit report to the distributor within a period of thirty days which the distributor shall forward to the broadcaster within seven days of its receipt:

Provided further that if the broadcaster finds that its observations are not addressed completely, the broadcaster may report to the Authority its specific observations with evidence within thirty days of receipt of updated audit report:

Provided also that the Authority shall examine the case on merits, at the fees and costs to be borne by the broadcaster, as may be specified by the Authority and, if found necessary, may permit the broadcaster to get a special audit conducted at the cost of broadcaster to ascertain the discrepancies pointed out by the broadcaster:

Provided also that in case of special audit, by broadcaster, the broadcaster shall give names of three auditors, from amongst M/s Broadcast Engineering Consultants India Limited and the empanelled auditors, to the distributor and the distributor shall choose one auditor for the special audit, within fifteen days, failing which broadcaster shall approach the Authority for selection of the auditor.

(2) (b) In case a broadcaster does not receive the audit report of the preceding financial year by the due date of 30th September –

(i) where the distributor of a television channel fails to share the audit report of the preceding financial year, under sub-regulation (1), with the broadcasters, with whom it has entered into interconnection agreement, by the 30th September of the year in which the audit was due to be conducted, it shall be permissible to the broadcasters either jointly or severally, after informing the distributor, in writing, to get the audit of the addressable system of such distributor of television channels done, at the cost of broadcaster.

(ii) where the audit is optional under sub-regulation (1), it shall be permissible to the broadcasters either jointly or severally, after informing the distributor, in writing, to get the audit of the addressable system done, at the cost of broadcasters.

Explanation: It is clarified that in case, an audit is got done by a broadcaster under these provisions, the audit shall be conducted only once in a year and completed within four months starting from the 30th September of that year:

(2) (c) In case the audit conducted under sub-regulation (1) or (2)(a) or (2)(b) reveals that –

- (a) there is a discrepancy in subscriber numbers, it may be settled as per provisions in the interconnection agreement between broadcaster and the distributor;
- (b) the addressable system being used by the distributor does not meet the requirements specified in the Schedule III or the Schedule X or both, it shall be permissible to the broadcaster to disconnect signals of television channels, after giving written notice of three weeks to the distributor.”

3. In Schedule III of the principal regulations,-

(a) for item (B), the following item shall be substituted, namely:-

“(B) Scheduling: The annual audit by distributor under sub-regulation (1) of regulation 15 shall be scheduled in the manner as specified in the said regulation.”;

(b) after item (E), the following item shall be inserted, namely:-

“(F) **Infrastructure sharing cases-**

1. SMS and CAS should have capability to meet all the requirements prescribed in this schedule for each distributor. Further, separate instances should be created for each distributor using shared SMS/CAS and the data between two or more distributors must be segregated in such a manner that entity wise reconciliation should be possible to be carried out between SMS and CAS.

2. The requirement in respect of watermarking for insertion of network logo for all pay channels at only encoder end shall be applicable for infrastructure provider. The infrastructure seeker shall provide network logo through STB/middleware. However, preferably only two logos, that is, of only broadcaster and last mile distributor shall be visible at customer end.”

4. In Schedule X of the principal regulations,-

(a) for item (B), the following item shall be substituted, namely:-

“(B) Scheduling: The annual audit by distributor under sub-regulation (1) of regulation 15 shall be scheduled in the manner as specified in the said regulation.”;

(b) after item (F), the following item shall be inserted, namely:-

“(G) **Infrastructure sharing cases-**

1. SMS and DRM should have capability to meet all the requirements prescribed in this schedule for each distributor. Further, separate instances should be created for each distributor using shared SMS/DRM and the data between two or more distributors must be segregated in such a manner that entity wise reconciliation should be possible to be carried out between SMS and DRM.

2. The requirement in respect of watermarking for insertion of network logo for all pay channels at only encoder end shall be applicable for infrastructure provider. The infrastructure seeker shall provide network logo through STB/middleware. However, preferably only two logos, that is, of only broadcaster and last mile distributor shall be visible at customer end.”

(Atul Kumar Chaudhary)
Secretary, TRAI

Note.1---- The principal regulations were published in the Gazette of India, Extraordinary, Part III, Section 4, vide notification No. 21-4/2016-B&CS dated the 3rd March, 2017 (1 of 2017).

Note. 2---- The principal regulations were amended vide notification No. 21-6/2019-B&CS dated the 30th October, 2019 (7 of 2019).

Note. 3---- The principal regulations were further amended vide notification No. 21-5/2019-B&CS dated 1st January 2020 (1 of 2020).

Note. 4---- The principal regulations were further amended vide notification No. RG-1/2/(3)/2021-B AND CS (2) dated 11th June 2021 (1 of 2021).

Note. 5---- The principal regulations were further amended vide notification No. RG-1/2/(2)/2022-B AND CS (2) dated 22nd November 2022 (2 of 2022).

Note. 6---- The principal regulations were further amended vide notification No. RG-1/2/(2)/2022-B AND CS (2) dated 14th September 2023 (4 of 2023).

Note. 7---- The principal regulations were further amended vide notification No. RG-8/1/(9)/2021-B AND CS (1 AND 3) dated 8th July 2024 (4 of 2024).

Note. 8---- The Explanatory Memorandum explains the objects and reasons of the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Seventh Amendment) Regulations, 2025 (_ of 2025).

Explanatory Memorandum

Introduction and Background

1. On 3rd March 2017, the Telecom Regulatory Authority of India (TRAI) notified the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017. The said regulations were further amended vide notification dated 30.10.2019, 01.01.2020, 11.06.2021, 22.11.2022, 14.09.2023 and 08.07.2024 [The principal Regulation along with its amendments are hereinafter referred to as “Interconnection Regulation 2017”].
2. The stakeholders have been raising certain issues for review of audit related provisions contained in the Interconnection Regulation 2017. Further, to incorporate Infrastructure sharing related provisions contained in the “Infrastructure sharing guidelines” issued by the Ministry of Information and Broadcasting (MIB), there was a need to review the audit related provisions and corresponding schedules of the Interconnection Regulation 2017. Accordingly, TRAI issued a consultation paper on ‘Audit related provisions of Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 and the Telecommunication (Broadcasting and Cable) Services Digital Addressable Systems Audit Manual’ on 9th August 2024 (hereinafter referred to as the “consultation paper”).
3. After taking into consideration the comments received from the stakeholders in response to the above-mentioned consultation paper and in-house analysis, the Authority has finalized the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Seventh Amendment) Regulations, 2025 (hereinafter referred to as the “Seventh Amendment Regulations”). The subsequent paragraphs explain the objects and reasons of the Seventh Amendment Regulations.

Audit related provisions in the Interconnection Regulation 2017

4. Regulation 15 of the Interconnection Regulation 2017 is, *inter-alia*, reproduced as under:

“15. Audit.— (1) Every distributor of television channels shall, once in a calendar year, cause audit of its subscriber management system, conditional access system and other related systems by an auditor to verify that the monthly subscription reports made available by the distributor to the broadcasters are complete, true and correct, and issue an audit report to this effect to each broadcaster with whom it has entered into an interconnection agreement:

Provided that the Authority may empanel auditors for the purpose of such audit and it shall be mandatory for every distributor of television channels to cause audit, under this sub-regulation, from M/s Broadcast Engineering Consultants India limited, or any of such empaneled auditors:

Provided further that any variation, due to audit, resulting in less than zero point five percent of the billed amount shall not require any revision of the invoices already issued and paid.

(1 A) If any distributor fails to cause audit once in a calendar year of its subscriber management system, conditional access system and other related systems, as specified under sub-regulation (1), it shall, without prejudice to the terms and conditions of its license or permission or registration, or the Act or rules or regulations or order made or direction issued thereunder, be liable to pay, by way of financial disincentive, an amount of rupees one thousand per day for default up to thirty days beyond the due date and an additional amount of rupees two thousand per day in case the default continues beyond thirty days from the due date, as the Authority may, by order, direct:

Provided that the financial disincentive levied by the Authority under this sub-regulation shall in no case exceed rupees two lakhs:

Provided further that no order for payment of any amount by way of financial disincentive shall be made by the Authority unless the distributor, has been given a reasonable opportunity of representation against the contravention of the regulations observed by the Authority.

(2) In cases, where a broadcaster is not satisfied with the audit report received under sub-regulation (1) or, if in the opinion of a broadcaster the addressable system being used by the distributor does not meet requirements specified in the Schedule III or the Schedule X or both, as the case may be, it shall be permissible to the broadcaster, after communicating the reasons in writing to the distributor, to audit the subscriber management system, conditional access system and other related systems of the distributor of television channels, not more than once in a calendar year:

Provided that the Authority may empanel auditors for the purpose of such audit and it shall be mandatory for every broadcaster to cause audit, under this sub-regulation, from M/s Broadcast Engineering Consultants India limited, or any of such empanelled auditors.

Provided further that if such audit reveals that additional amount is payable to the broadcaster, the distributor shall pay such amount, along with the interest at the rate specified by the broadcaster in the interconnection agreement, within ten days and if such amount including interest due for any period exceed the amount reported by the distributor to be due for such period by two percent or more, the distributor shall bear the audit expenses, and take necessary actions to avoid occurrence of such errors in the future:

Provided also that it shall be permissible to the broadcaster to disconnect signals of television channels, after giving written notice of three weeks to the distributor, if such audit reveals that the addressable system being used by the distributor does not meet the requirements specified in the Schedule III or the Schedule X or both, as the case may be.

(3) Every distributor of television channels shall offer necessary assistance to auditors so that audits can be completed in a time bound manner.”

5. The sub-regulation (1) of Regulation 15 of the Interconnection Regulations 2017 mandates all the distributors of television channels to cause audit of their system once in a calendar year. As per the existing provisions of Interconnection Regulations 2017, if any DPO fails to cause audit of its system once in a calendar year, then such a DPO is liable to pay a financial disincentive (with an upper cap on the financial disincentive of rupees two lakhs per year).

6. In this regard, the issues for consultation in the consultation paper were as follows:

Q1. Should provision of Regulation 15(1) be retained or should it be removed in the Interconnection Regulation 2017?

- i) In case you are of the opinion that provisions of Regulation 15(1) should be retained then*
 - a. Should it continue in its present form or do they need any modifications?*
 - b. In case you are of the opinion that modifications are required in Regulation 15(1) of the Interconnection Regulation 2017, then please suggest amended regulations along with detailed justification for the same.*
- ii) In case it is decided that provisions of Regulation 15(1) should be removed then what mechanism should be adopted to ensure that the monthly subscription reports made available by the distributors to the broadcasters are complete, true and correct?*

Q2. Should small DPOs be exempted from causing audit of their systems every calendar year, under Regulation 15(1) of Interconnection Regulation?

A. If yes, then,

- 1. Should 'subscriber base' of DPO be adopted as a criterion for defining small DPOs for this purpose?*
 - i. If yes,*
 - a) what limit of the subscriber base should be adopted to define small DPOs for the purpose of exempting them from causing audit of their systems under Regulation 15(1)?*
 - b) on which date of the year should the DPOs' subscriber base be taken into consideration for categorising whether or not the DPO falls in exempted category?*

- c) *In case any distributor is offering services through more than one distribution platforms e.g. distribution network of MSO, IPTV, etc. then should the combined subscriber base of such distributor be taken into consideration for categorising whether or not the distributor falls in exempted category?*
 - ii. *If ‘subscriber base’ criterion is not to be adopted, then what criteria should be selected for defining small DPOs?*
 - 2. *In case it is decided that small DPOs may be exempted from causing audit of their systems under Regulation 15(1), then should broadcasters be explicitly permitted to cause subscription audit and/or compliance audit of systems of such DPOs, to verify that the monthly subscription reports made available by the distributor to them are complete, true and correct?*
 - i. *If yes, what should be the mechanism to reduce burden on small DPOs that may result due to multiple audits by various broadcasters?*
 - ii. *If no, what should be the mechanism to verify that the monthly subscription reports made available by the small DPOs to the broadcasters are complete, true and correct?*
 - B. *If you are of the view that the small DPOs should not be exempted from the mandatory audit, then*
 - i. *how should the compliance burden of small DPOs be reduced?*
 - ii. *should the frequency of causing mandatory audit by such small DPOs be decreased from once in every calendar year to say once in every three calendar years?*
 - iii. *alternatively, should small DPOs be permitted to do self-audit under Regulation 15(1), instead of audit by BECIL or any TRAI empaneled auditor?*
- Q3. *As per the existing Interconnection Regulation, all the distributors of television channels have been mandated to cause audit of their system once in a calendar year. Should the existing provision of “calendar year” be continued or “financial year” may be specified in place of calendar year? Please justify your answer with proper reasoning.*

Q4. As per the existing Interconnection Regulation, the annual audit caused by DPO under regulation 15 (1), shall be scheduled in such a manner that there is a gap of at-least six months between the audits of two consecutive calendar years and there should not be a gap of more than 18 months between audits of two consecutive calendar years. Instead of above, should the following schedule be prescribed for annual audit?

- i) The DPOs may be mandated to complete annual audit of their systems by 30th September every year.*
- ii) In cases, where a broadcaster is not satisfied with the audit report received under regulation 15(1), broadcaster may cause audit of the DPO under Regulation 15(2) and such audit shall be completed latest by 31st December.*
- iii) In case DPO does not complete the mandatory annual audit of their systems by 30th September in a year, broadcaster may cause audit of the DPO under Regulation 15(2) from 1st October to 31st December year. This shall not absolve DPO from causing mandatory audit of that year by 30th September and render the non-complaint DPO liable for action by TRAI as per the provisions of Interconnection Regulation 2017?*

Justify your answer with proper reasoning.

Q5 In case you do not agree with schedule mentioned in Q4, then you are requested to provide your views on the following issues for consultation:

- i. As per the existing Interconnection Regulation, the annual audit caused by DPO under regulation 15(1), shall be scheduled in such a manner that there is a gap of at-least six months between the audits of two consecutive calendar years and there should not be a gap of more than 18 months between audits of two consecutive calendar years. Does the above specified scheduling of audit need any modification? If yes, please specify the modifications proposed in scheduling of audit. Please justify your answer with proper reasoning.*
- ii. For the audit report received by the broadcaster from the DPO (under regulation 15(1)), should the broadcasters be permitted to cause audit under regulation 15(2) within a fixed time period (say 3 months) from the date of receipt of that report for that calendar year, including spilling over of such period to the next year?*

- *If yes, what should be the fixed time period within which a broadcaster can cause such audit. Please support your answer with proper justification and reasoning.*
- *If no, then also please support your answer with proper justification and reasoning?*

iii. In case a DPO does not cause audit of its systems in a calendar year as specified in Regulation 15(1) then should broadcasters be permitted to cause both subscription audit and/or compliance audit for that calendar year within a fixed period (say 3 months) after the end of that calendar year?

- *If yes, what should be the fixed time period (after the end of a calendar year) within which a broadcaster should be allowed to get the subscription audit and/or compliance audit conducted for that calendar year? Please support your answer with proper justification and reasoning.*
- *If no, then also please support your answer with proper justification and reasoning?*

Q6. What measures may be adopted to ensure time bound completion of audits by the DPOs? Justify your answer with proper reasoning.

Stakeholder's response to Q1

7. In response, many stakeholders opined that the Regulation 15(1) should be retained in its present form. One of the views emerged during the consultation process was that there is no flaw in Regulation 15 (1) and it should be retained “as it is”, however, the efficacy & intention behind its implementation needs to be reviewed in a serious manner, which will help in ensuring its compliance. Some stakeholders suggested the following crucial steps be undertaken by the Authority to ensure that Regulation 15(1) shall be followed in letter and spirit:

- a. The list of the DPOs who have not complied with Regulation 15(1), shall be reviewed periodically (in 6 months) and shall be displayed on TRAI website for Public.
- b. If any DPOs, after receiving due notice from Authority, doesn't comply with Regulation 15(1), then Authority shall recommend “license cancellation” to MIB.

c. As broadcasters provides signals to all the DPOs, therefore they are aware about the whereabouts & operational network of a DPO, therefore they should be strictly prohibited to provide any TV signal to non-complied DPOs, and they should also adhere to this.

d. The financial disincentive (up to Rs. 10 lakhs) should also be imposed on the Broadcasters, if they are found providing signals to the non-complied DPOs, as they should be considered as promoting non-compliance of TRAI Regulations.

e. Moreover, the non-complied DPOs shall also be barred from Infrastructure Sharing.

8. On the other hand, some stakeholders opined that Regulation 15(1) should be removed. A stakeholder's association submitted that regulation 15(1) should be removed from the Interconnection Regulation 2017, and broadcasters should be given an unfettered, first right to cause audits of DPOs' system. Accordingly, suitable modifications should be carried out in the extant Interconnection Regulations. This change will ensure that broadcasters, who are the owners of TV channels, have the ability to verify the MSRs which form the basis of their revenue, and can do so in a timely manner. It was submitted that under the current regime, although DPOs were mandated to conduct audits, many of them fail to do, or they do so only after inordinate delays and repeated requests of broadcasters. As per the submission, DPOs push back on broadcaster-caused audits, by asking broadcasters to provide strict proof of discrepancies found in the DPOs' audit report, and by delaying the broadcaster-caused audits on various pretexts. Submission cited multiple instances in the past where the broadcaster had sought time to conduct an audit, and the same was denied by the DPO; where it was found that the DPO's audit report was manipulated, incomplete, and inaccurate; instances of delay in submission of audit report. This has led to expiration of the statutory period for retaining data, meaning there can be no verification of data for that period. As a result of Regulation 15(1), broadcasters are forced to resort to litigation to exercise their right to audit under Regulation 15(2). While some stakeholders argued that they experience difficulty in arranging technical audits every year from empaneled auditors and the respective rates charged by these auditors were extremely high and they cannot afford it.
9. Some stakeholders suggested that Regulation 15(1) should be retained but with certain modifications. One of the views recommended that Regulation 15(2) of the challenge

audit should be removed. Giving a second option that allows broadcasters to challenge audits [Regulation 15(2)] is unnecessary, adds cost to compliance, and gives a higher pedestal to broadcasters allowing them to seek an additional audit over and above the Regulator's own defined audit process. It was suggested that to simplify Audit Process, audit frequency must be modified to 'once in 2 financial years to reduce the compliance burden, outdated and redundant provisions in Schedule III (requirements of Digital Addressable Systems) and Schedule IX [Testing and Certification regime for Conditional Access Systems (CAS) & Subscriber Management Systems (SMS)] should be eliminated. It is also important to ensure that all DPOs, including smaller operators, are subject to audit requirements since this will help ensure content security, maintain a level playing field and ensure compliance across the industry. It was further emphasized that Regulation 15(2) of challenge audit should be removed, however, in case the Authority believes that such a provision should be retained then even in such a case, there remain concerns with the challenging of audits, which should be addressed as follows:

- If a DPO has completed an annual audit by TRAI empaneled auditor, broadcasters should be restricted from challenging the audit without valid justification and substantiated data.
- Currently the clause relating to the trigger of an audit by a broadcaster is open ended. This should be modified so that the audit can be triggered by the broadcaster if the difference in the subscriber count is more than 2%. In any case, in no scenario should this lead to any disruption of service.
- Broadcasters with a subscriber base of less than 10% of the total base of DPO, should not be given the option to trigger an audit of DPOs (considering the total base of DPOs).

10. One of the views that emerged during the consultation process was that Regulation 15(1) should be retained but not on a compulsory basis. Some stakeholders opined that audit should be at least once every 2/3/4/5 year so that burden on small MSOs is less. One of the views received during the consultation process was that auditor fees may be fixed. Another view received during the consultation process was that the provision under Regulation 15(1) is a very necessary condition and its presence provides the basis for implementation of payment arrangements, revenue collected/shared between the DPO and the broadcaster and appropriate taxes payable to the Government. This means that it

should not be removed, but appropriate self-audit arrangements should be added, where small DPOs are not burdened with the burden of audit fees.

Stakeholder's response to Q2

11. In response, many stakeholders opined that small DPOs should be exempted u/r 15(1). One of the views was that there should not be any audit as it is an additional burden. MSOs are not in a position to bear the cost of the audit and that if an audit is still necessary, then the audit should be done without any charge. One of the suggestions received during the consultation process was that there should not be any audit requirement for small DPO's as a smaller number of DPO's are left in our country due to these regulations. Criterion for determining the threshold for exemption depending on subscriber base varied among the stakeholders and it ranged from 5000 to 50000. One of the opinions amongst the stakeholder was that audit is not economically possible in calendar year and requested audit should not be mandatory for DPOs with less than 5000 subscriber base and for 5000-10000 subscriber base audit may be required once in 3 years. Another view received during the consultation process was that DPO's working at district levels should be waived off from 15(1).
12. One of the Stakeholder's associations opined that Regulation 15(1) should be removed from the Interconnection Regulation 2017, and broadcasters be given unfettered first right to audit, however, in case Regulation 15(1) is retained in some form or the other, then any DPO with less than 30,000 subscribers should be exempted from Regulation 15(1) audit. With respect to such DPOs, a broadcaster can conduct audit under Regulation 15(2) at its discretion once in a calendar year. Also, once the broadcaster has informed the DPO that it would like to conduct audit under Regulation 15(2), then the DPO cannot create impediment/stall the broadcaster audit by stating that it will get audit conducted under Regulation 15(1). However, such exemption shall not apply in case a DPO has less than 30,000 subscribers and forms a part of a JV or is otherwise sharing infrastructure, unless the JV or the parties to the infrastructure sharing arrangement together have less than 30,000 subscribers.
13. Another opinion was that regulation should be same for all the DPOs and there shall be no disparity in terms of small or big, as any exemption to smaller DPOs will further increase the disparity and non-compliance of the Regulation. One of the views that

emerged during consultation process was that the law of land never differentiates between caste, creed, economic condition and influence of the offender and the same is in the case of companies act also. The Companies Act do not discriminate between the companies on the basis their turnover, therefore, providing exemption to DPOs on the basis of size/turnover will not serve the purpose. It was also expressed that Clause 15(1) was introduced in the regulation for bringing transparency in Cable TV and Broadcasting domain, so as to curtail, underreporting happening in the sector. Any exemption to clause 15(1), will further increase the underreporting and unauthorized distribution, which will be a huge loss to the exchequer. One of the views suggested that audit should be compulsory for every DPO whether it is small or big, audit fees can be regulated for smaller DPOs which have subscriber base less than 1000. Another opinion emphasized that conduct of audit by some DPOs and not by others will create chaos. Non-audit by certain DPOs may lead to unauthorized distribution of services and non-declaration of correct number of subscribers being serviced by those DPOs, and hence it would not only deviate from the principal of transparency but also effect the implementation of digitization. Consequent upon which it may not only lead to an increase in piracy but also lead to fixed fee deals. Further, some of the bigger DPOs may take advantage of this loophole and take multiple licenses and would keep the size in the category of smaller DPO and would not conduct the audit.

14. On the question of frequency of audit, many stakeholders opined that the frequency of audit should be changed to once every 2 or 3 or 5 years for small DPOs. One of the views suggested that Audit frequency must be modified to 'once in two financial years to reduce the compliance burden. Another view was that an audit should be done once every 5 years. Another opinion was that the process of the audit requires some changes, as in the present system small DPO is facing monetary problems, because the audit fee is much higher, and it should be done by all broadcasting companies simultaneously or by an empaneled auditor. Further, for self-audit, the fee should be 15000/- only or if it is not possible then the audit should be done every three years. One of the views suggested for audit once in license period. On the other hand, one stakeholder's association disagreed with the proposal and stated that there is neither much cost involved, nor it is a cumbersome process, therefore decreasing the frequency from one year to three years will defeat the purpose of DAS Audit. Also, there will be a significant increase in the legal matters

between DPOs and Broadcasters. Therefore, frequency should not be decreased, and it should continue to be mandated once in calendar year.

15. On the question of which date of the year should the DPOs' subscriber base be taken into consideration for categorising whether or not the DPO falls in exempted category, one of the opinions amongst the stakeholders was that the same date should be considered i.e., every year ending or as decided by TRAI. Another opinion suggested that subscriber base as on last financial year should be considered since subscriber base of DPOs are decreasing day by day.
16. On the question of whether the combined subscriber base of distributors be taken into consideration for categorising whether or not the distributor falls into exempted category in case any distributor is offering services through more than one distribution platforms e.g. distribution network of MSO, IPTV, etc., the stakeholder's opinion was divided. One of the views that emerged was that collective/combined subscriber base of all its distribution platforms should not be considered since DPO executes separate interconnection agreements with broadcasters for each of its distribution platforms. Another view was that the combined subscription base should be taken into consideration.
17. In response to the question that if small DPO is exempted from regulation 15(1), then should broadcasters be explicitly permitted to cause audit of systems of such DPOs, one of the stakeholder's associations opined that any DPO with less than 30,000 subscribers should be exempted from Regulation 15(1) audit and with respect to such DPOs, a broadcaster can conduct audit under Regulation 15(2) at its discretion once in a calendar year. One of the opinions suggested that in case it is decided that differential treatment of DPOs based on subscriber base needs to be given, then broadcasters should be permitted to conduct only the subscription audit of such small DPOs under Regulation 15(2) and only in case any broadcaster doubts the completeness/correctness/truthfulness of the MSRs submitted by any such category of DPOs. The minimum requirement for conducting a compliance (technical) audit must be enforced annually for all DPOs.
18. In response to the question that if small DPOs are not exempted, then how should the compliance burden of small DPOs be reduced, one of the views received was that there is no compliance burden on small DPOs, except doing only one audit in one calendar

year. Also, this one-time audit process gets completed in a week's time for smaller DPOs and takes 3-4 weeks for bigger DPOs having 7-8 head ends, therefore as such there is no compliance burden on the DPOs. Hence, getting the audit done once in calendar year is neither increasing any cost burden nor is it increasing any compliance burden on small DPOs. Moreover, Authority can publish a general rate card for audit fees, which shall be based upon number of CAS/number of SMS /number of subscribers/expected time to complete the audit etc. and it will also reduce the burden of smaller MSOs. Another suggestion received during the consultation process was that in case it is decided to reduce the compliance burden of certain category of DPOs (basis their subscriber numbers), then, to reduce the compliance burden of such DPOs and to ensure parity, either of the following methods could be adopted:

Method 1:

- i) Choice of whether a DPO can conduct audit of their system under Regulation 15(1) should remain with the DPOs.
- ii) The DPOs (big or small) could be given an option of communicating/reporting officially to TRAI at the beginning of every calendar year (and within the first 3 months of that calendar year) as to whether they are willing to carry out audit of their systems i.e. both compliance and subscription annual audits as per Regulation 15(1) in that calendar year.
- iii) In case the DPO is not willing/not responding, then, the Authority may instruct the Broadcasters to carry out the audit of such systems as per Regulation 15(2) and submit such reports to TRAI.
- iv) For all DPOs who communicate their willingness to TRAI at the beginning of the year as per above and yet fail to conclude the DAS audit of that calendar year, then, appropriate punitive action against the DPO could be looked at by the Authority.

Method 2:

- i) All DPOs (big or small) must compulsorily conduct the compliance audit of their systems by any empaneled auditor annually as per Regulation 15(1) and submit the annual compliance report to TRAI.
- ii) For the conduct of subscription audit for DPOs less than a certain subscriber base (and in case decided to be exempted from audits), the broadcasters should be given the option to conduct the subscription audit under Regulation 15(2)

only in case any broadcaster has reason to doubt the completeness/correctness/truthfulness of MSRs submitted by any such category of DPOs.

19. On the question, if small DPOs should be permitted to do self-audit under Regulation 15(1), instead of audit by BECIL or any TRAI empaneled auditor, many stakeholders disagreed and opined that the word self- audit is contrary to itself, as audit in itself means scrutiny of data or system by an authenticated third party, which necessarily needs to be un-biased. Some stakeholders favoured self-audit system, wherein the smaller DPOs don't have to be burdened with the heavy fees of Audit charges.

Stakeholder's response to Q3

20. In response, some of the stakeholders opined that calendar year should be continued. One stakeholders' association submitted that Regulation 15(1) of the Interconnection Regulations should be abolished but in case it is retained then they are fine with DPOs conducting audit under Regulation 15(1) once in a calendar year as long as the same is strictly adhered with. One of the opinions received during consultation process expressed that the current provision of annual audit in a calendar year and a minimum & maximum between two consecutive audits is fine and there is no need to modify them. Further, there is no connection between the audit period under TRAI regulations and the financial year reporting by a company under the Companies Act, 2013. One of the opinions expressed that the annual DAS audit has two components: one being the compliance audit and the other, the subscription audit. The annual audit conducted by DPOs lean more towards the technical compliance and technical aspects of the system. Further, any financial audit carried out with respect to income tax and corporate laws, which has mandated that the financial accounts be based on the financial year system, and as such, financial year based audit should not be the benchmark for DAS audits. Thus, DAS audits can continue to be scheduled once in a calendar year as it is currently without any alteration.
21. Another group of stakeholders opined that existing provision of 'Calendar year' should be replaced with 'Financial Year'. One stakeholder association submitted that calendar year should be replaced with financial year, as all the accounting provisions and audits in India are scheduled based on the financial year. Also, the calendar year is not in synchronization with the annual financial year contracts and financials agreed with the

broadcasters. One of the opinions received during the consultation process was that aligning the audit period with the financial year ensures consistency with other financial reporting and compliance requirements. This makes it easier for DPOs to integrate the audit process with their annual financial audits. Renewal of Reference Interconnect Offer (RIO) takes place during January and February. Therefore, considering past practice, conducting the audit on the basis of the calendar year is not feasible. A similar view opined that the existing provision of calendar year may be replaced with financial year, which will bring conformity and similarity with other accounting and taxation practices and laws, as all the books of accounts and audits in India are based on the financial year. Another view received during consultation process proposed that the requirement for the subscription and compliance audit should be aligned with the financial year. This adjustment would provide several practical and regulatory benefits that would enhance the effectiveness of the audit process. Further, most businesses, including DPOs, operate and report their financials on a financial year basis and by aligning the audit requirement with the financial year, the audit process would naturally integrate with the DPOs' existing financial audit and reporting cycles. This alignment would streamline the audit process, reduce administrative burden and ensure that the audit captures a complete and accurate representation of the DPO's operations over a consistent period. Moreover, subscription revenue(s) is a key component of the broadcasting segment, and aligning the audit period with the financial year would ensure that subscription and compliance audits are consistent with the financial data reported.

Stakeholder's response to Q4

22. In response, many stakeholders agreed with the proposed timelines of DPO caused audit by 30th September every year and broadcaster-initiated audits by 31st December every year. These stakeholders mentioned that this ensures compliance and reduces unnecessary conflicts and disputes. One of the stakeholders association expressed that they are in complete agreement with the above-mentioned timelines as they are time bound, relevant and put the onus on both the stakeholders for a timebound DAS audit and its necessary reporting and it will also save the unnecessary litigations and long drawn queries from broadcasters, which many a time comes till 6 months of sharing the audit report with broadcasters. Another opinion expressed that the requirement for the DPO to complete its mandatory annual audit by September 30th is indeed very relevant, and the timelines must be strictly adhered to as the deadline of September 30th for completing the mandatory

annual audit is a critical regulatory requirement and this timeline ensures that all DPOs are evaluated within a consistent timeframe, which is essential for maintaining uniformity and fairness across the industry. Adhering to this deadline helps ensure that all entities are held to the same standards and practices. It will also save unnecessary litigation. One of the views received during the consultation process suggested further that in the event a DPO fails to comply with the audit requirement under 15(1) within the prescribed timelines, then the broadcaster should not provide signals to such DPO. It was suggested that 15(2) should not become a fishing inquiry or a tool for the broadcaster to arm twist the DPOs. One of the views in support of the above argument opined that this would bring seriousness and discipline in conducting audit and reduce the conflicts and disputes between DPOs and broadcasters, as broadcasters seek queries even after 6 months or for the previous year from the audit.

23. Another opinion that emerged during consultation process disagreed with the proposed timelines and opposed the proposal of reducing the period for conducting audit by DPOs to 9 months from the current 12 month. One of the views received expressed that the current provision of an annual audit in a calendar year and a minimum & maximum between two consecutive audit is fine and there is no need to modify them. Further that the provision of audit by a broadcaster ‘not more than once in a calendar year’ in clause 15(2) should be stretched to mandate if one broadcaster has initiated a subsequent audit post receipt of an audit report, no other broadcaster would be permitted to cause audit for the same calendar year. One of the opinion submitted during the consultation process was that the provision for broadcaster-initiated audit on DPOs should be deleted as firstly broadcasters audit is not required, as throughout the year the broadcasters do not object to the reports submitted to them, however, towards the end of the year, when there is no concurrence on commercial terms, they bring up the need to audit, with obtuse questions to victimize the DPOs with their threat. This unbound power given to the broadcasters needs to be removed to bring a balance in the ecosystem. Secondly, TRAI mandated audits are done by empaneled auditors. This should bring finality. Broadcaster audit is not at all required.
24. Another opinion was that the annual audit should be completed within nine months of the end of the previous financial year, i.e., by December of the current financial year (FY). The Audit Manual prescribes a large amount of data to be shared with the Auditors.

Therefore, sufficient time is required to complete the audit, especially for those DPOs that have huge data. Secondly, provide a grace period of 3 months (i.e., until March of the current FY) to DPOs, which allows DPOs additional time to complete the audit if they face any delays. This flexibility helps ensure compliance without compromising the audit's integrity. Thirdly, the requirement of Regulation 15(2) of a broadcaster caused audit/challenge audit should be done away with. Lastly, if the DPO does not complete the audit within the specified time period (i.e., after the grace period as well - March of the current Financial Year), broadcasters should be allowed to initiate an audit of the DPOs' systems only within the next six months.

25. One of the stakeholder's association opined that in case Regulation 15(1) is retained in some form or the other, then DPOs should be mandated to complete audit under Regulation 15(1) and submit audit reports (including submission of missing annexures and/or supporting data/documents that may be pointed out by broadcaster and/or responding to other audit queries) to broadcasters by 30th June of a calendar year, so that broadcasters get ample time to conduct audit under Regulation 15(2) at their discretion. Further, broadcasters will continue to have the right to conduct audit under Regulation 15(2) at any time (i.e., even before 30th June).

Stakeholder's response to Q5

26. In response, many stakeholders mentioned that they agree with the schedule mentioned in Q4. Some stakeholders expressed that the existing scheduling requirement of a six-month minimum gap and an 18-month maximum gap between audits is appropriate and effective. It ensures regular and timely audits while providing the necessary flexibility for organizations to manage their audit schedules effectively. Therefore, no modifications to the current timeline are needed. One of the views submitted that the broadcasters should be permitted to cause audit under regulation 15 (2) within a fixed time period from the date of receipt of that report for that calendar year, including spilling over of such period to the next year. However, the Broadcasters must identify the specific issues as per the Regulations/Audit Manual for which they are not satisfied with the Audit Report and communicate the same to the DPOs within 4 weeks of receipt of the Audit Report. Further, in case a DPO fails to commence the Annual Audit as per Regulation 15(1) within a fixed time frame, then the Broadcasters can be permitted to conduct DAS Audit of such DPOs under 15(2). In our opinion, in case the DPO has not communicated

commencement of the mandatory DAS Audit under 15(1) within six months of completion of the calendar year, then the Broadcasters should seek clarification on the same from the DPO. In case the DPO does not share any schedule for planned commencement of DAS Audit as per Regulation 15(1) within 4 weeks of receipt of such Broadcaster communication, then the Broadcaster should be allowed to conduct Audit of the DPO's system under Regulation 15(2)

27. Some stakeholders were of different views on the aforesaid issue. A stakeholder's association submitted that with respect to binding broadcasters to conduct audit under Regulation 15(2) within a fixed timeline post receipt of Regulation 15(1) audit reports from DPOs, such timeline should not be mandated upon broadcasters since majority of the audit reports submitted by DPOs under Regulation 15(1) have important annexures, supporting data/documents missing and DPOs take months to furnish the same and also to respond to broadcaster's audit queries. Some DPOs also use the excuse of data migration/system crash/server issues/non availability of CAS/SMS tech support. And with respect to binding broadcasters to conduct audit under Regulation 15(2) within a fixed timeline post end of a calendar year, when DPOs have not got audit done under Regulation 15(1) during the calendar year, such timeline should not be mandated upon broadcasters since DPOs most of the time face challenges in arranging necessary technical support for facilitating broadcasters' audit requirements.
28. One of the views expressed during consultation process was that TRAI mandated audits should be final, and the Broadcasters should not be given the right to audit DPOs as it is merely a duplicity of work, adding to the costs and burden to the DPOs. Any gaps discovered by the TRAI Auditors get flagged and remedial measures can be taken accordingly. One of the views received during the consultation process further stressed on aligning the audit period with the financial year which ensures consistency with other financial reporting and compliance requirements. Further, the annual audit be completed within nine months of the end of the previous financial year, i.e., by December of the current financial year and a grace period of three months (i.e., until March of the current FY) should be provided which allows DPOs additional time to complete the audit if they face any delays. If the DPO does not complete the audit within the specified time (i.e., after the grace period as well - March of the current Financial Year), broadcasters should be allowed to initiate an audit of the DPOs' systems only within the next six months.

After this period, no further audits should be allowed to be triggered, ensuring a clear and predictable audit schedule. In case the Regulation 15(2) is retained on justifiable grounds, then, to maintain a structured and timely audit process, broadcasters should be allowed to initiate queries on the audit done by TRAI empaneled auditor only within one month of receiving the audit report from the DPO. This will ensure that any discrepancies or issues are addressed promptly and efficiently. After this period, no further queries should be allowed to trigger.

Stakeholder's response to Q6

29. In response, one of the stakeholder associations submitted that to ensure timely completion of audits by DPOs, heavier penalties that can act as deterrent should be imposed on DPOs for non-compliance along with the cancellation of license to operate their respective distribution platform and blacklisting them for a period of 3 years from operating any kind of distribution platform, Further, it should be mandated that audit should be completed within 10-14 days. One of the views submitted during the consultation was that the penalty of late submission of audit report after the due date should be levied to ensure strict compliance.
30. Another views received during consultation process opined that broadcasters should be mandated to provide the Transport Stream (TS) and all audit-related queries, if any to the empaneled auditor or the concerned DPO, at least 15 days in advance from the date of commencement of the audit of the concerned DPO and that financial disincentives should also be levied on the broadcasters in case there is a delay of more than 15 days in providing the required response to the Auditor/DPO. Further, improving the quality of auditors empaneled by TRAI is crucial for ensuring that audits are conducted with accuracy, integrity, and professionalism. The Authority in collaboration with BECIL should undertake periodic training programs in line with new regulations, technological advancements, and emerging industry practices for upgrading skills of the auditors. Well-trained auditors are better equipped to identify discrepancies, ensure compliance, and provide constructive feedback. Enhanced training ensures that auditors are up to date with the latest industry standards, leading to more effective audits. It also reduces the risk of errors or oversight during audits, thereby improving the overall quality of the audit process.

31. One of the opinions suggested that DPO must complete self-audit as per 15(1) by 30th June, so after completion of 30th June if Audit is not caused, they should pay penalty. If broadcasters will cause audit, it would be very tough for DPOs to manage all broadcasters' audit.
32. Another views suggested that strict action to be taken by TRAI against defaulters by imposing financial disincentives to the tune of five lacs on first default and 10 lacs on second default and one lac per day on continuing default and if the default is continued despite reminders and notices by TRAI, in such a case TRAI should suggest cancellation of their license. Further, not only this, but some action should also be there on broadcasters, for despite knowing that any DPO is defaulting in audit and no audit report is being sent to the broadcasters, the broadcaster continues to provide signals to the defaulting DPOs and not disconnecting their signals this means that the broadcasters are also abetting the default and hence there should be financial disincentives against those broadcasters also.
33. Some stakeholders opined that all their queries should be provided by the broadcaster to the DPO/Auditor within 15 days of the intimation by the DPO of the date of commencement of audit. This will help in reducing significant amount of time spent on the audit as well as ensuring time bound completion. One of the opinions received amongst such stakeholders also submitted that the financial disincentive should also be levied on the broadcasters in case there is a time delay of more than 15 days in providing required response to the Auditor/DPO. Few stakeholders opined that measures presently in place mandating "Non-Compliance" title to an errant DPO is more than sufficient as this will result in broadcasters not signing new RIO Agreement. One of the suggestions received during consultation process was that time bound completion of audits is also dependent on the active participation and co-operation of the DPO's vendors during the conduct of any Audit at the DPOs premises. It is seen that some of the delays that are caused during the conduct of Audit are due to the lack of proper support available to the DPO from the respective vendors during the conduct of any audit/lack of understanding of the regulatory requirements by the respective vendors. This becomes especially challenging in scenarios where the previous commercial relation between the DPO and the concerned vendor has come to a stop for any reason whatsoever. Therefore, the Authority may direct the SMS, CAS and STB vendors of all DPOs to extend complete

co-operation and support during Audit even if existing commercial relations do not exist between the parties as the systems deployed come under the purview of the Regulations and hence the vendors must ensure Compliance.

Analysis

34. As mentioned earlier, the sub-regulation (1) of Regulation 15 of the Interconnection Regulations 2017 mandates all the distributors of television channels to cause audit of their system once in a calendar year. As per the existing provisions of Interconnection Regulations 2017, if any DPO fails to cause an audit of its system once in a calendar year, then such DPO is liable to pay a financial disincentive (with an upper cap on the financial disincentive of rupees two lakhs per year). However, despite the provision of financial disincentive being in place and constant efforts made by TRAI and MIB, it has been observed that many distributors are still not getting their system audited in a time-bound manner.
35. The Audit of the systems of DPO is necessary to ensure that the systems deployed by a DPO are addressable as per the regulatory requirement. Proper and accurate subscription reports are very important as the settlement of charges between the service providers is based on such reports. Audit of systems is a tool to verify the correctness of data and systems specification as per the requirements under the regulations. Moreover, allowing audit of addressable systems helps in confidence building measures in the value chain. Therefore, in the Interconnection Regulation 2017, a mechanism was put in place for audit of such addressable systems. The Authority was of the view that if a DPO gets its system audited by an auditor for the purpose of verifying subscription reports and sends these reports to the broadcasters then the problem of multiple audits of a DPO by different broadcasters in different time period can be solved significantly. This will also reduce the burden on the broadcasters and DPOs. Accurate subscriber reporting underpins fair and transparent revenue-sharing between broadcasters and DPOs. Without a verifiable mechanism to crosscheck subscriber declarations, disputes over inconsistencies and underreporting would likely proliferate eroding trust in the system and undermining contractual settlements. Accordingly, the provision of mandating the distributors of television channels to cause audit of their system once a year has been retained in the Regulation.

36. Further DPOs with significantly low subscriber base have informed TRAI in various meetings verbally that they find difficulty in causing audits of their systems every year as they have capacity constraints in terms of manpower as well as financial resources. Further representations were also received from a few small DPOs with requests to exempt them from audit due to their inability to afford audit fees. Several MSOs have also requested MIB for exemption from the requirement of audit due to inability to afford audit fee on account of small subscriber base. In the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) (Fourth Amendment) Regulations, 2024 (3 of 2024) dated 08.07.2024, the Authority considering DPOs with subscriber base < 30,000 as smaller DPOs had made certain compliances optional for such DPOs like having Interactive Voice Response System (IVRS), hosting its own website with provision for Consumer Corner, Subscriber Corner and Manual of Practice, etc. In continuation of its efforts towards facilitating ease of doing business, the Authority is of the view that the requirement of annual audit may be made optional for the distributor(s) having less than 30000 active subscriber base. This measure alleviates the compliance burden on smaller operators, many of whom highlighted that audit costs consume a disproportionate share of their revenues, while at the same time it retains the option of voluntary audits. This approach is in line with promoting ease of business and reducing regulatory burden on MSOs with subscriber base below a threshold and with limited resources, and the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) (Fourth Amendment) Regulations, 2024 (3 of 2024) wherein certain obligations have been made optional for the small DPOs. However, such distributors are also encouraged to get their systems audited annually. The threshold of 30000 subscribers will be reviewed by the Authority from time to time.
37. Regarding the issue as to whether the existing provision of “calendar year” should be continued or “financial year” may be specified in place of calendar year, many stakeholders have advocated for financial year. These stakeholders have mentioned that the existing provision of calendar year, should be replaced with financial year, as all the accounting provisions and audits in India are scheduled based on the financial year. These stakeholders have informed the Authority that the calendar year is not in synchronization with the annual financial year contracts and financials agreed with the broadcasters. This will bring conformity and similarity with other accounting and taxation practices and law, as all the

books of accounts and audits are based in India on the financial year. Both broadcasters and DPOs already report their financials on financial year basis and by aligning audit on financial year basis, the audit process will also align with financial audit and reporting cycles. Further the agreements based on reference interconnect offer are also signed on financial year basis. To ensure consistency with agreements between service providers, financial reporting and compliance requirements, the Authority is of the view that the existing provision of the calendar year should be replaced with financial year. This aligns DAS audits with the financial year, 1st April to 31st March, for the preceding financial year.

38. In order to ensure time bound completion of audit, the Authority is of the view that the audit shall be conducted for the preceding financial year such that the audit report is shared by the distributor with each broadcaster with whom it has entered into an interconnection agreement by 30th September of the financial year. To ensure comprehensive coverage, the regulations allow the inclusion of any unaudited period preceding the financial year for which the first audit is conducted under the revised framework, closing historical gaps and creating a clean baseline for compliance.
39. Further the distributors have been mandated to inform broadcaster(s) with whom they have entered into an interconnection agreement regarding the schedule of its DAS system audit including name of the selected auditor at least 30 days in advance. Such broadcaster(s) may depute their representative (not more than one per broadcaster) for attending the audit in person and the distributor shall facilitate the same. The broadcaster's representative may share their input for verification during audit process. The Authority is of the view that presence of broadcaster's representative will ensure that the issues/ concerns of the broadcaster is taken care of during the audit and may build trust in audit conducted.
40. The Authority is also of the view that similar to financial auditing, auditors auditing digital addressable systems of the DPOs may be mandated to furnish audit certificate, to the distributor confirming that the auditor is independent of the auditee and that the audit was conducted in accordance with the provision of the regulations, and the auditor shall also furnish such other information or certification as may be specified by the Authority from time to time.

41. As regards variation of subscriber number found during audit vis-à-vis monthly subscriber reports, suitable provisions should be made in the Reference Interconnection Offers (RIOs)/Interconnection Agreements (IAs) to address such discrepancy, if any.
42. As mentioned earlier, the sub-regulation (2) of Regulation 15 of the Interconnection Regulations 2017 mentions that in case a broadcaster is not satisfied with the audit report received from DPO or, if in the opinion of a broadcaster the addressable system being used by the distributor does not meet requirements specified in interconnection Regulation 2017, broadcaster, can cause audit of DPO, not more than once in a calendar year by BECIL or an auditor empaneled by the Authority. Some DPOs have raised the issue that broadcasters often cause audit under regulation 15(2) without valid justification and substantiated data. The Authority is of the view that one audit by DPO and another by broadcaster adds cost to compliance and thus second audit of the same system should be undertaken only on justifiable grounds. Also questioning an audit by BECIL or TRAI empanelled auditors, reflects poorly on the whole system.
43. The Authority is of the view that in cases, where a broadcaster finds discrepancy(ies) in the audit report received from distributors, the broadcaster may point out the same to the distributor of television channel, from whom the audit report has been received, citing specific observations(s) with evidence against audit report, within thirty (30) days of receipt of audit report. A copy of the same may be given by the broadcaster to the concerned auditor. The distributor on receiving such observations from broadcaster shall refer the same to the auditor concerned within seven (7) days to examine and address the observation. The auditor shall address the observations of the broadcaster and provide it's updated audit report within a period of thirty (30) days of receipt of observations of the broadcaster to the distributor. This step ensures that the original auditor, who best understands the audit findings, rechecks, corrects or clarifies them promptly. The distributor shall provide such updated audit report to concerned broadcaster within seven (7) days of receipt of such updated audit report.
44. If the broadcaster finds that its observations are not addressed completely, the broadcaster may report to the Authority its specific observations with evidence within thirty days of receipt of updated audit report. The Authority shall examine the case on merits, at the fees and costs to be borne by the broadcaster as may be prescribed by the Authority, and if found

necessary may permit the broadcaster to get a special audit conducted at the cost of broadcaster to ascertain the discrepancy(ies) pointed out by that broadcaster. In case of special audit by broadcaster, the broadcaster shall give names of three auditors, amongst M/s Broadcast Engineering Consultants India Limited or any of empanelled auditors to the distributor and the distributor shall choose one amongst them for the special audit within fifteen (15) days failing which broadcaster shall approach the Authority for selection of auditor.

45. Further if audit under sub-regulation (1) or (2)(a) or (2)(b) reveals that –

- (a) there is a discrepancy in subscriber numbers, such cases may be settled as per provisions in the interconnection agreement between broadcaster and the distributor. Hence it is expected that suitable provisions for addressing this issue may be made by the service providers in the forthcoming RIOs/IAs.
- (b) the addressable system being used by the distributor does not meet the requirements specified in the Schedule III or the Schedule X or both, it shall be permissible to the broadcaster to disconnect signals of television channels, after giving written notice of three weeks to the distributor.

46. In case the distributor of a television channel fails to share the audit report of the preceding financial year, with the broadcasters, with whom it has entered into interconnection agreement, by the 30th September of the year in which the audit was due to be conducted, it shall be permissible to the broadcasters either jointly or severally, after informing the distributor, in writing, to get the audit of the addressable system of such distributor of television channels done, at the cost of broadcaster. It shall also be permissible to the broadcasters either jointly or severally, after informing the distributor, in writing, to get the audit of the addressable system done, at the cost of broadcasters, of those distributors of television channels for whom the audit under Regulation 15(1) is optional and who have not shared, by the due date of 30th September, the audit report of the preceding financial year, with the broadcaster. It is clarified that in case of audit by broadcasters, the audit under these provisions shall be conducted only once in a year and completed within four months starting from the 30th September of the year. The nitty-gritties of joint audit and its related coordination mechanism for identifying the auditor is left to the industry.

47. In view of above, suitable provisions have been included in the regulations. However, the market developments shall be monitored, and further intervention as felt necessary shall be considered at appropriate time.

48. In the consultation paper, the issues for consultation were as follows:

Q9. In light of the infrastructure sharing guidelines issued by MIB, should clause D-14 (CAS & SMS) of Schedule-III of Interconnection Regulation 2017, be amended as follows:

“The watermarking network logo for all pay channels shall be inserted at encoder end only.

Provided that only the encoders deployed after coming into effect of Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Amendment) Regulations, 2019 (7 of 2019) shall support watermarking network logo for all pay channels at the encoder end.

In case of infrastructure sharing, the infrastructure sharing provider shall insert its watermarking network logo for all pay channels at encoder end while each DPO taking services from infrastructure provider distributor shall insert its own watermarking network logo for all pay channels at STB end.”

Please support your answer with proper justification and reasoning. If you do not agree then suggest an alternative amendment, with proper justification?

Q10. In case of infrastructure sharing, if it is decided that the infrastructure sharing provider shall insert its watermarking network logo for all pay channels at encoder end while each DPO taking services from infrastructure provider distributor shall insert its own watermarking network logo for all pay channels at STB end,

i) does the specification of the logos (transparency level, size, etc), of both Infrastructure provider and infrastructure seeker distributors, need to be regulated? If yes, please provide detailed specification (transparency level, size, etc) of the logos of both Infrastructure provider and infrastructure seeker distributor.

- ii) *Since appearance of the logos of more than one DPO on the TV screen may compromise the quality of the video signal at the subscriber's end, what measures such as overlapping logos of the DPOs or any other solution, should be adopted to ensure that while logo of the DPO (infrastructure seeker) is prominently visible on the subscriber's TV screen, the objective of tracing piracy is also met through watermarking the network logo of the infrastructure provider DPO suitably? Please provide details of measure proposed.*

Please support your answer with proper justification and reasoning.

Q11. In light of the infrastructure sharing guidelines issued by MIB, should clause C-14 (CAS & SMS) of Schedule-III of Interconnection Regulation 2017), be amended as follows:

"The CAS shall be independently capable of generating, recording, and maintaining logs, for a period of at least immediate preceding two consecutive years, corresponding to each command executed in the CAS including but not limited to activation and deactivation commands issued by the SMS.

In case Infrastructure is shared between one or more distributors, the CAS shall be capable of generating, recording, and maintaining logs for each distributor separately for the period of at least immediate preceding two consecutive years, corresponding to each command executed in the CAS including but not limited to activation and deactivation commands issued by the SMS."

Please support your answer with proper justification and reasoning. If you do not agree then suggest an alternative amendment, with proper justification?

Q12. For those cases of infrastructure sharing where the CAS and SMS are not shared by the infrastructure provider with the infrastructure seeker,

- i. *do you agree that in such cases, the audit of the infrastructure seeker so far as the shared infrastructure is concerned, should extend to only those elements*

of the infrastructure of the provider which are being shared between the DPOs?

- ii. *should a broadcaster be permitted to cause the complete technical audit of all the DPOs, including the audit of the shared infrastructure, as a precondition for the broadcaster to provide the signals of television channels, if the broadcaster so decides?*

Please support your answers with proper justification and reasoning.

Q13. In case CAS and SMS are shared amongst service providers,

- i. *what provisions for conducting audit should be introduced to ensure that the monthly subscription reports made available by the distributors (sharing the infrastructure) to the broadcasters are complete, true, and correct, and there are no manipulations due to sharing of CAS/DRM/SMS?*
- ii. *should a broadcaster be allowed to simultaneously audit (broadcaster-caused audit) all the DPOs sharing the CAS/DRM/SMS, to ensure that monthly subscription reports are complete, true, and correct in respect of all such DPOs, and there are no manipulations due to sharing of CAS/DRM/SMS? Support your answer with proper justification and reasoning.*

Q14. Do you agree that in case of infrastructure sharing between DPOs,—suitable amendments are required in the Schedule III of the Interconnection Regulation and the audit manual for assessment of multiplexer's logs during audit procedure? If yes, please suggest the proposed amendment(s), keeping in mind that no broadcaster should be able to see the data of another broadcaster. Please support your answer with proper justification and reasoning. If you do not agree, then also please support your answer with proper justification and reasoning?

Q17. In light of the infrastructure sharing guidelines issued by MIB for sharing of infrastructure amongst MSOs, amongst DTH operators and between MSO and HITS operator, do you think that there is a need to amend any other existing provisions of Interconnection Regulations 2017 or introduce any additional regulation(s) to facilitate infrastructure sharing amongst MSOs, amongst DTH operators and between MSOs and HITS operators? If yes, please provide your comments with reasons thereof on amendments (including any addition(s)) required in the

Interconnection Regulation 2017, that the stakeholder considers necessary in view of Infrastructure guidelines issued by MIB. The stakeholders must provide their comments in the format specified in Table 4 explicitly indicating the existing Regulation number/New Regulation number, suggested amendment and the reason/full justification for the amendment in the Interconnection Regulation 2017.

Table 4: Format for stakeholders' response on amendments required in Interconnection Regulation 2017 in view of Infrastructure guidelines issued by MIB

<i>S no</i>	<i>Regulation number of the existing Interconnection Regulation 2017/New Regulation number proposed in the Interconnection Regulations 2017 (1)</i>	<i>Provisions of the existing Regulation (2)</i>	<i>Amendment/ new provision(s) suggested by the stakeholder (3)</i>	<i>Reasons/ full justification for the proposed amendment (4)</i>
<i>1</i>				
<i>2</i>				

(Note: In case additional regulation is proposed column (2) may be left blank)

Stakeholder's response to Q9

49. In response, many stakeholders disagreed with the proposed amendment. One of the views expressed during the consultation process was that under infrastructure sharing arrangements, logo insertion from encoder shall lead to various complications of logo overlap and user experience problems so watermark logo insertion from encoder should not be mandated. It was further suggested that to address this requirement of anti-piracy, DPO triggered fingerprint can still serve the purpose in the following way in case someone is able to alter/mask the watermark logo:

1. Broadcaster shall be able to identify the infrastructure provider using broadcaster triggered fingerprint.
2. On identifying the infrastructure provider source, broadcaster shall make the infrastructure provider accountable to trigger the DPO triggered fingerprint for identifying the real DPO (infrastructure seeker/infra provider) STB ID.

3. Since infra provider does not have the capability currently available for triggering the fingerprint on infrastructure seeker STB, there are 2 possible solutions-
 - Develop a utility using fingerprint API of all infra seekers so that it triggers FP immediately or
 - Establish a common anti-piracy team of all partner DPOs to trigger the fingerprint within prescribed timeframe.
50. One stakeholder's association suggested that in case of infrastructure sharing, the watermarking logo can be inserted either at the encoder end or STB end. One of the opinions received was that insertion of watermarking logo should essentially happen at encoder end only to prevent any unnecessary incidents of piracy. However, in case of infrastructure sharing, the watermarking logo can be inserted either at the encoder end or STB end. Further, it was opined by many stakeholders that watermarking logo can be inserted either at the encoder end or STB end and decision should be mutually decided between provider and seeker. Some stakeholders further expressed that if the infrastructure is to be shared, inserting a logo should be at the STB end only or if a common infrastructure is used a logo of provider and DPO can be placed at Different locations not overlapping each other.
51. Another view expressed during consultation process was that inserting logos through encoder, in case of infrastructure sharing will not only complicate the scenario but also have additional cost and suggested that encoder level logo insertion should not be mandated and only STB level logo insertion can serve the purpose of infrastructure sharing needs and anti-piracy requirements. One of the opinions received during consultation process suggested that the infrastructure sharing providers shall insert the watermarking network logo for all the pay channels from encoder end and DPO who are in shared network will also insert their logo from STB end. Another suggestion was that most MSOs have old encoder and there is no vendor support to upgrade and small DPO can't afford all new hardware, so there should be some relaxation for the MSOs if they are operating in a limited area with honestly no chances of piracy.
52. On the other hand, a few stakeholders agreed with the proposed amendment. One of the views was that the amendment in the specified clause is required to ensure that the operators sharing infrastructure can be identified for piracy individually through watermarking.

53. One stakeholder's association expressed that the proposed stipulations require proper examination and practical testing before introduction and submitted that the current proposals appear to be based on theoretical understanding rather than practical experience. There is no evidence presented on how commands executed through CAS or SMS can be definitively attributed to a specific DPO. Before any changes are made, TRAI needs to conduct comprehensive study, tests and analysis of the practical challenges involved and how they can be demonstratively addressed. The stakeholder further mentioned that the proposed stipulations are susceptible to misuse, especially in scenarios where competing DPOs collude to target another DPO sharing infrastructure and attributing their own subscribers to the targeted DPO could unfairly burden the latter with additional regulatory compliance and costs. TRAI has not provided any clarity on the recourse or remedies available to address such situations. It is crucial to anticipate various potential misuse scenarios and have robust remedial solutions in place. Further the proposed stipulations could necessitate joint and simultaneous audits of multiple DPOs, which could be a complex and resource-intensive task, especially if numerous DPOs are involved in sharing infrastructure, or if some are no longer operational. The stakeholder further recommended that TRAI conducts thorough and transparent testing through regulatory sandboxing before implementing any sweeping changes. Regulatory sandboxing provides a controlled environment where new regulatory approaches and technologies can be tested in a real-world setting, without exposing stakeholders and consumers to undue risks. The stakeholder proposed the following amendment:

“The watermarking network logo for all pay channels shall be inserted at encoder end only.

Provided that ~~only the~~ encoders deployed ~~after~~ before coming into effect of Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Amendment) Regulations, 2019 (7 of 2019) ~~shall~~ that do not support watermarking network logo for all pay channels at the encoder end shall be decommissioned and replaced with encoders that support watermarking network logo for all pay channels at encoder end, on/before 31st March 2025.”

In case of infrastructure sharing, the infrastructure sharing provider shall insert its watermarking network logo for all pay channels at encoder end while each DPO taking services from infrastructure provider distributor shall insert

its own watermarking network logo for all pay channels at STB end. The two watermarks should be visible on the screen, one watermark of the infrastructure sharing provider from encoder end & one watermark of the DPO taking services from the infrastructure provider distributor from STB end. Provided that the STB watermark should be 50% transparent.”

Stakeholder’s response to Q10

54. In response, some stakeholders opined that the current transparency level is kept at around 80% for DPO triggered logo and overlapping of logo is avoidable using STB inserted logo. Having 2 logos on screen along with broadcaster logo would bring bad user experience and confusion. Therefore, it would be difficult to carry both the DPOs logos on the screen and it is advisable that infrastructure seeker logo should be given priority.
55. One of the views submitted that insertion of two logos will not only lead to complexities and complications but also irritate and disturb the subscriber viewing experience. This would mean that the subscriber will be watching three logos (i) one from the infra service provider, (ii) another from the infra service receiver and (iii) the other from the broadcaster. This will be in addition to the forced messages or scroll to be run by the DPOs. The purpose of controlling piracy can be tackled by the flashing of FP at broadcaster level and STB level and it is suggested that current level of transparency around 80% is to be maintained for DPO logo.
56. On the other hand, one of the opinions suggested that the specification of the logos should not be regulated considering the complexity involved in implementing at the STB end for development and required specification. Specifications should be left to the operator to decide, considering that it is important that the viewing experience and video quality are not impacted, and that regulatory compliances are adhered to and presently, there does not exist any viable solution which can address DPOs’ watermarking requirements without affecting video quality.
57. Some stakeholders opined that multiple logos would cause distraction to the viewer. An agreed place for the DPO and the Content Distributor can be arranged easily to sort out this issue. One of the views received was that to ensure quality of video signal at the subscriber end and to stop piracy through watermarking logo few regulations should be made that:

- a. Logo size should not be greater than 1080P.
- b. Logo should be clearly visible.
- c. More than one logo of DPO and more than one logo of broadcaster should not be visible on TV Screen.

58. One of the stakeholder's associations submitted that since 2 watermarks are appearing on the screen, the STB-end watermark should be kept at 50% transparency so as not to hamper the consumer's viewing experience. The primary DPO/infrastructure sharing provider should insert its watermarking network logo for all pay channels at encoder end while each DPO taking services from infrastructure provider distributor shall insert watermarking network logo for all pay channels at STB end, placed in such a way that watermarking network logo of infrastructure sharing provider should not get overlapped or hidden. Ideally Infrastructure sharing provider watermarking network logo should be 50% transparent with 2cm X 2 cm and to be placed on the right lower side of the screen and each DPO taking services from infrastructure provider shall insert logo with 50% transparent 50% with 1.5cm X 1.5 cm on lower left side of the screen and ensure that both logos should be prominently visible on the subscriber's TV screen. It will help the field team to identify both logos without any confusion and help to trace the source of the signal in case of piracy. Further, it should be mandatory for infrastructure sharing platforms to enable fingerprinting at every 10 minutes interval on all STBs.

Stakeholder's response to Q11

59. In response, many stakeholders agreed with the proposed amendment with some modifications. Some stakeholders opined that "logs" should mean & defined as, "transactional logs and all commands exchanged between CAS & SMS excluding CAS Internal Logs in the backend components within CAS Solution/ System are also considered as logs". While making an amendment, the type of logs shall be clearly captured in the amendment and therefore the revised clause C-14 be as follows:

"The CAS shall be independently capable of generating, recording, and maintaining transactional logs, for a period of at least immediate preceding two consecutive years, corresponding to each command executed in the CAS including but not limited to activation and deactivation commands issued by the SMS."

In case Infrastructure is shared between one or more distributors, the CAS shall be capable of generating, recording, and maintaining transactional logs for each distributor separately for the period of at least immediately preceding two consecutive years, corresponding to each command executed in the CAS including but not limited to activation and deactivation commands issued by the SMS.”

60. Another view agreed with the proposed amendment. One of opinions received suggested that in case of sharing of infrastructure the following should be ensured:
- i. CAS instances for the infrastructure provider and seeker should be separated into logical instance with separate database. The hardware and associated infrastructure (space and power) requirements may only be shared.
 - ii. Each CAS instance will communicate to only one SMS. A CAS instance to be addressed by multiple SMS cannot be allowed, since in such a situation the one-to-one correspondence is lost.
61. A stakeholder’s association while agreeing with the proposed amendment suggested that the CAS shall be capable of whitelisting and tagging all STB/VCs of respective distributors and generating, recording and maintaining logs with date and time stamp for a period of at least immediately preceding 3 consecutive years, corresponding to each command executed in the CAS including but not limited to activation and deactivation commands issued by the SMS. The stakeholder’s association further suggested a three-year period so as to enable broadcasters to conduct audits, keeping in mind the number of DPOs each broadcaster must provide signals to, and the complexity involved in auditing DPOs which are sharing infrastructure. Furthermore, in case of infrastructure sharing, only the headend/video signals/transport stream should be shared between the infrastructure provider and the infrastructure seeker, and each entity should maintain its own independent CAS & SMS. Stakeholders’ association mentioned that TRAI should not permit the sharing of CAS and SMS as it also undermines the fundamental principles of competition, service differentiation and service/subscriber identification/correlation to relevant DPOs and that the systems remain crucial for DPOs to manage subscriber access, deliver unique services, and protect content security. Further, it could lead to potential content security and distribution risks, including under-declaration of subscribers, which would adversely impact broadcasters.

Stakeholder's response to Q12

62. In response, many stakeholders agreed with proposition of 12(i) that audit of infrastructure seekers should extend to only those elements of the infrastructure of the provider which are being shared between the DPOs.
63. On the other hand, some of the stakeholders disagreed from proposal 12(i). One of the opinions suggested that for those cases of infrastructure sharing where the CAS and SMS are not shared by the infrastructure provider with the infrastructure seeker, a separate audit of the infrastructure seeker and the infrastructure provider should be conducted. A stakeholder's association expressed that in cases where the CAS and SMS are not being shared between the infrastructure provider and seeker, for the infrastructure seeker, all elements must be audited, not just the elements of the infrastructure provider which are being shared, to evaluate if infrastructure sharing is happening in actual and to what extent. The audit should commence simultaneously for all infrastructure providers and seekers.
64. On the question of 12(ii) i.e. should a broadcaster be permitted to cause the complete technical audit of all the DPOs, including the audit of the shared infrastructure, as a precondition for the broadcaster to provide the signals of television channels, many stakeholders opined that broadcasters audit should not be a precondition in the interest of time to market considering the number of broadcasters involved and long lead time of concluding an audit. One of the opinions received recommended that a single auditor should be permitted to conduct audits for all line of services – DTH, HITS, IPTV etc. and Further, broadcasters should not be allowed to commission a complete technical audit of all the DPOs, including an audit of shared infrastructure, as a precondition to providing the signals of television channels because it is sensitive information related to network architecture. CAS /SMS are, in any case, an integral part of the addressable system and are of a technical nature.
65. On the other hand, one stakeholder's association agreed with proposition of 12(ii) and opined that the broadcaster should be permitted to cause complete audit of all elements of all the DPOs involved in the infrastructure sharing arrangement, including the audit of shared infrastructure, as a precondition for the broadcaster to provide signals of television channels, so as to understand the type and manner of infrastructure being shared between DPOs and how many DPOs are sharing the infrastructure. Further, one of the views

received was that a complete technical audit of all DPOs, including the audit of shared infrastructure, should not be a precondition for a broadcaster to provide signals of television channels. Imposing such a requirement would not be in the best interest of the industry, as it would significantly delay the time-to-market process due to the involvement of multiple broadcasters and the extended time required to conclude an audit.

Stakeholder's response to Q13

66. In response, one stakeholder's association opined that where CAS and SMS are being shared amongst service providers, the systems of the DPO providing infrastructure should be capable of generating individual reports for each DPO seeking infrastructure. Additionally, it should be possible for broadcasters to disconnect individual DPOs sharing infrastructure for any reason, including but not limited to non-compliance with provisions of the regulations or defaulting in payments towards subscription fees, or indulging in piracy. Broadcasters should be allowed to conduct joint and simultaneous audits covering all elements of all the DPOs sharing the infrastructure.
67. Some stakeholders opined that in case of CAS/SMS/DRM sharing, broadcaster audit of infrastructure seeker can be mandated in accordance with the existing audit manual specifications as it is sensitive in nature from all stakeholders' perspective. They further stated that while allowing simultaneous audits by broadcasters is feasible, a strict timeline of 4 weeks should be established to complete the audit upon receiving notice from all DPOs involved in sharing CAS/SMS/DRM. They have further expressed that there should be an insertion of new provision in schedule III, point number C (5).
- “Provided that, any CAS instance can be integrated with only a single SMS.”
68. On the other hand, one of opinions suggested that the existing provisions for conducting audit are sufficient to ensure that the monthly subscription reports made available by the DPO to the broadcasters are complete, true, and correct, and there are no manipulations due to sharing of CAS/DRM/SMS, Similar provisions may be applied in case of infra-sharing service provider and that the broadcaster may be allowed to simultaneously audit (broadcaster-caused audit) all the DPOs sharing the CAS/DRM/SMS.
69. On question of simultaneous audit (broadcaster-caused audit) of all the DPOs sharing the CAS/DRM/SMS, many stakeholders agreed to the simultaneous broadcasters caused audit

and opined that a strict timeline of 4 weeks need to be defined to conclude the same on receiving the notice from all such DPOs sharing CAS/SMS/DRM. However, on the other hand another view expressed that the broadcaster should not be allowed to simultaneously audit (broadcaster-caused audit) all the DPOs sharing the CAS/DRM/SMS as all DPOs/MSOs/DTH/HITS are required to undergo mandatory annual audit every year. Therefore, any specific/relevant requirements of the broadcaster can be audited during the yearly audits themselves.

70. One of the views that emerged during the consultation process recommended that audits (both under regulation 15(1) and 15 (2)) of the infrastructure provider and the infrastructure seeker(s) should be done simultaneously so that complete data dumps can be extracted from the shared CAS and SMS systems simultaneously and the entire universe of STBs (along with all entitlement records) can be divided amongst the service providers based on the unique identifier/differentiator defined in the shared CAS and SMS systems.

Stakeholder's response to Q14

71. In response, some stakeholders expressed that although there is no risk of information leakage with respect to Mux infrastructure sharing per se but to efficiently limit the audit scope with respect to a particular DPO, it is recommended to provide Transport stream wise breakup of each DPO sharing a common Mux. They proposed the following amendment in section 4.5 of Audit manual for infra sharing:

“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) as per the Infra sharing declaration done for the respective DPO like MUX ID, TS ID, Service ID listing of the overall Service Lineup of DPO under Audit.”

72. One of the opinions received during the consultation process was that if multiplexer is common & they are doing simul-crypt of signal, in such a case broadcaster can see the logs during audit. However, if the DPO is running both feeds separately with two different MUX then broadcaster should be allowed only to see his own part. In addition, it should be mandated that broadcasters should not require the service provider to show the data of another broadcaster.

73. On the other hand, another opinion received suggested that in cases of infrastructure sharing, the existing clause 4.5 is applicable and no changes are required, since the multiplex output (transport stream) carries common ECM and EMM from the shared CAS platform.
74. One stakeholder's association suggested that multiplexers play an important role of carrying the services in encrypted or unencrypted mode. Auditors should be specifically given free access to review the same and regulations should be amended to specifically reflect that MUX logs should be made available for review/verification during audits to ensure channel encryption status throughout the audit period. DPOs should be mandated to maintain such logs at least in the form of non-editable archived reports for a period of at least three preceding years. The association suggested the following amendments in Schedule III of the Interconnect Regulation and the audit manual:
- i. Both infrastructure provider & infrastructure seeker should maintain the logs of the Network Service Manager controlling the compression chain of all encoders and all multiplexer ("MUX") and the MUX logs must be maintained with details of audio video PID mapping, service IDs, service names, and all information related to the services and encryption. The distributor of television channels shall provide recording of all the Transport Stream ("TS") being distributed from its headend on request by the broadcaster.
 - ii. Further, encryption of all channels distributed by the distributor of television channels must be implemented only by the CAS on the MUX and not on any other device of the headend. Many DPOs pass the channels through the MUX in unencrypted mode and scrambles the entire stream at the QAM (Modulator) which cannot individually activate/deactivate a channel on the subscriber STBs. This results in under declarations since these channels have no record in the CAS and SMS systems. The association suggested Amendment to Clause D14 as follows:
"the primary DPO/infrastructure sharing provider should insert its watermarking network logo for all pay channels at Encoder end while each DPO taking services from infrastructure provider distributor shall insert watermarking network logo for all pay channels at STB end, place in such a way that watermarking network logo of infrastructure sharing provider should not get overlapped or hide. Ideally Infrastructure sharing provider watermarking network logo to be placed on the left lower side of

the screen and each DPO taking services from infrastructure provider shall insert logo on lower right side of the screen".

Stakeholder's response to Q17

75. In response, one stakeholder's association suggested addition of a new Chapter related to 'Infrastructure Sharing' in the Interconnection Regulation 2017, to add any clauses related to infrastructure sharing. In this regard, the detailed response of the stakeholder is available on the TRAI website.
76. One of the views received during the consultation process suggested a holistic method to infrastructure sharing that extends beyond cable and broadband services. Infrastructure sharing should be allowed in all possible scenarios and across all platforms, including but not limited to DTH and IPTV.

Analysis

Watermarking from the Encoders

77. As per (D) 14 of Schedule III of Interconnection Regulations 2017:

"The watermarking network logo for all pay channels shall be inserted at encoder end only. Provided that only the encoders deployed after coming into effect of these Amendment regulations shall support watermarking network logo for all pay channels at the encoder end."

Similar provisions exist in Schedule X of Interconnection Regulations 2017.

78. Interconnection Regulations 2017 mandated insertion of watermarking network logo from encoder end for pay channels. The main purpose of the abovementioned clause is to tackle piracy by tracing the source of signal which is used for piracy. However, in case of infrastructure sharing between DPOs since the encoders may be shared by multiple DPOs, inserting multiple watermarking of each DPO from encoders will result in appearance of multiple DPO logos on the end screen which will compromise the quality of the video signal on the TV screen. Accordingly, the Authority is of the view that infrastructure provider may be mandated to insert watermarking network logo at only encoder end and infrastructure

seeker may be permitted to provide network logo through STB/middleware. However, to protect the interest of the consumer, the Authority is of the view that multiple logo appearance on video signal needs to be avoided. Accordingly, not more than 2 logos – one of the broadcasters and the other of the last mile distributor, should preferably be visible at customer end at any time on the end screen.

SMS and CAS independently capable of generating, recording and maintaining logs

79. As per (C) 2 of Schedule III of Interconnection Regulations 2017:

“The SMS shall be independently capable of generating, recording, and maintaining logs, for the period of at least immediate preceding two consecutive years, corresponding to each command executed in the SMS including but not limited to activation and deactivation commands.”

As per (C) 14 of Schedule III of Interconnection Regulations 2017:

“The CAS shall be independently capable of generating, recording, and maintaining logs, for the period of at least immediate preceding two consecutive years, corresponding to each command executed in the CAS including but not limited to activation and deactivation commands issued by the SMS.”

80. Similar provisions exist in Schedule X of Interconnection Regulations 2017. In case of infrastructure sharing wherein SMS, CAS, DRM, may also be shared such provisions need to be amended in order to ensure that SMS, CAS and DRM have capability to meet all the requirements prescribed in Interconnection Regulation for each distributor. Further, separate instances should be created for each distributor using shared SMS/CAS/DRM and the data between two or more distributors must be segregated in such a manner that entity wise reconciliation should be possible to be carried out between SMS and CAS/DRM.
81. Regarding other issues raised in the consultation paper suitable amendments may be made in the Telecommunication (Broadcasting and Cable) Services Digital Addressable Systems Audit Manual’ dated 9th August 2024.
82. In view of above, suitable provisions have been included in the regulations.
