

Subject: **TRAI Consultation Paper (Consultation Paper No. 6/2016) On Issues related to Quality of Services in Digital Addressable Systems and Consumer Protection 16/5/2016** Date: 06/15/16 02:18 PM
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Sir,

I am writing as one of the stakeholder of CATV/DTH as subscriber. I am from Telecom background and sharing my experience taking into account the ICT and convergence of Telecom and Broadcasting in near future. The comments are submitted as personal opinion.

Comments on Consultation Paper:

Q1: What should be broad contours for QoS Regulatory framework for digital addressable systems? Please furnish your comments with justification.

A1: Since with ICT taking off, the Telecom and CATV are going to converge, therefore, the regulatory framework should be similar to Fixed Line telecom Services. The CATV operator can provide TV, Internet services. Telecom Operator can provide TV and Internet Services. In this situation regulatory framework has to be similar for both. They can't be discriminated.

Q2: Should there be a uniform regulatory framework for Quality of service and Consumer protection across all digital addressable Platforms? Please provide your comments with justification.

A2. As mentioned above in A1, since both Broadcasting and Telecom are converging, the similar guidelines have to be there.

Q3: Should timelines relating to various activities to get new connect be left to the DPOs to be transparently declared to the subscribers? If so, how the interest of the subscriber can be protected if the connection is not provided in given time frame?

A3. As on date no standard is there. Only competition is driving. This is the perception I have as subscriber. There is no documented details practically on this. In case of CATV we have no option. Only one CATV operator is covering area. Therefore no option in CATV presently. We only have option of Dish TV (Satellite TV) which has its own vices like during rain it disrupts. There is no standard of service provision and maintenance. As on date practically no protection is perceived by the customer. At least in Telecom, there is set system. This should be protected in both broadening and Telecom. This should be published by regulatory authority periodically for monitoring and control of performance on connection time parameter with incentive and penalty to operator.

Q4: What should be the time limits for various activities, as mentioned below, to get new connection? Please provide your comments with justification.

(c) Response time for processing new service request and conveying feasibility of providing connection at the desired location

(d) Time line for completion of CAF, installation and activation of service

A4: Similar to Telecom guidelines. In this case it can be better than Telecom as most of the network is on Aerial with monopoly in small geographical area by DPO/LCO. Moreover, now Mobile is dominating over Fixed Telecom lines and services are provided fast. Customer expects fast service.

Q5: Should minimum essential information to be included in the CAF be mandated through regulations to maintain basic uniformity? Give your suggestions with justification.

A5: Yes.

Q6. Should minimum font size need to be specified for CAF? If not, how can it be ensured that important information provided in CAF is given in such a manner that consumer can read them easily?

A6: It should be readable. We should avoid fonts companies use for*condition apply.

Q7: Should use of e-CAF be facilitated, encouraged or mandated? Please provide your comments with justification.

A7. We should avoid paper work. Mobile application should be developed and all formalities should be done on mobile. Only in cases where people don't use such mobiles or are illiterate, there paper formalities should be used. We should give some incentive to use mobile app.

Q8: Should the minimum essential information to be included in the MoP be mandated through regulations to maintain basic uniformity and to ensure that consumers get all relevant information about the services being subscribed?

A8: Since TV is all over. We should simplify and only essential information to protect customer should be incorporated.

Q9: What should be the minimum information to be included in MOP Give details with justification?

A9: Similar to Telecom with simplification as it is one way.

Q10. Should it be necessary to provide printed copy of MOP to all the customers at the time of subscription to the service? If not, how it can be ensured that all required information is available to subscribers when required?

A10. We should save environment and avoid paper use. It should be in database at common point. Subscriber can extract when needed by using 1800 type of service on mobile.

Q11: Should there be an initial subscription period while providing a new connection to protect the interest of both the subscriber as well as DPOs?

A11. It should be there as DPO is doing investment and revenue projections based on these connections. In case of Transfer or change of house, inter operator transfer should be ensured to protect subscriber interest also. I don't know whether any duration is there now in Telecom fixed line? It should match that. If it is not there, it should also be included in Telecom. In case not able to transfer, then as exception it should not be there.

Q12. If so, what should be the duration of such initial subscription period?

A12. Should be similar to Telecom fixed line duration.

Q13. What protections should be provided to subscribers and DPOs during initial subscription period? Give details with justification?

A13. Protection similar to Telecom fixed line system.

Q14. What should be the framework for compensation to the subscriber for dropping of a channel due to its non availability on the DPOs' platform?

A14. The rate of channel (which are chargeable) X twice/day with a minimum of Rs 4/day and for free to Air channels may be token Rs 3/day/channel. This is just to discourage such situation.

Q15. How should the reduction in subscription charges be calculated in case of discontinuation of channel from DPOs platform? Please provide your comments along with justification.

A15. From monthly bill the amount can be deducted.

Q16. What should the maximum permissible time of disruption beyond which subscriber must be compensated in following cases?

(a) Disruption due to technical fault on the DPO network or at the subscriber's end

(b) Disruption due to technical fault of CPE at the subscriber's end

A16. 4 Hours normally is MTTR in Telecom national Networks. Since here it is limited to small locality here for (a) it can be 2 hours and for (b) it can be 1 hour.

Q17. What should be the duration of disruption in service warranting compensation to the consumer and how the compensation should be calculated in following cases?

(a) Continued Disruption due to technical fault on the DPO network at the subscriber's end beyond the pre specified time.

(b) Continued Disruption due to technical fault of CPE at the subscriber's end beyond the pre specified time.

A17. Beyond limits mentioned in A16.

Q18. What should be the framework and terms and conditions for shifting of connection including timelines in respect of PAN India DPOs where provision of connection at new location is feasible?

A18. Similar to Telecom.

Q19. Is there a need to prescribe procedure for transfer of the TV connection? If so, what should the procedure, terms and conditions for transfer of services connection and timelines?

A19. Yes. Similar to Telecom.

Q20. What should be the framework to address the concerns of stakeholders (Subscribers and DPOs) relating to temporary suspension of service?

A20. Similar to Telecom. Safe custody.

Q21. How issue of abrupt closure of service due to non payment can be addressed while protecting the interest of subscribers and DPOs?

A21. Similar to Telecom.

Q22. Is gradual closure of service as discussed in para 8.23 is a feasible option? If so what should be procedure and the framework?

A22. Reply in A21.

Q23. What should the procedure and timeframe to inform the subscriber regarding closure of service due to closure of business?

A23. Similar to Telecom with transfer arrangement to other operator.

Q24. Why uptake of mandated schemes for set top box (Outright purchase, Hier purchase, and on rent) is so low at present? How consumer awareness on these issues can be increased?

A24. TV and Radio are best to increase awareness. also by Mobile App. Presently no one is driving awareness program practically. Only sometime that program is there on TV.

Q25. What should be the consumer friendly common framework of CPE Schemes for providing CPE to consumers in digital addressable system? Please provide your comments with justification?

A25. Similar way as BB Modem of Internet connection.

Q26. What should be minimum essential information related to a CPE scheme that must be made available to the consumers to safeguard their interests? Please provide your comments with justification.

A26. No comments.

Q27. What measures may be adopted to ensure availability of good quality CPE to consumers?

A27. Replacement at site.

Q28. Should any charges such as visit charges, etc. be charged from the subscribers during guarantee-warranty period?

A28. First from call centre guide which should be free. During warranty- Guarantee it should not be charged as it is in very small geography.

Q29. What should be provisions for maintenance of CPE after the expiry of guarantee- warranty period?

A29. Annual AMC similar to other products at site.

Q30. What should be the simplified provisions for surrender of CPE in case of closure of service by the subscribers in order to protect their interest?

A30. Return CPE as per discounted rate predefined at the time of delivery. This can be reused by operator with warranty to new customer at discounted rate. Option available to customers for new and old working.

Q31. Please suggest the standards and essential technical parameters for ensuring good quality of service for the following digital addressable platforms:

e). Digital Cable TV

f). DTH

g). HITS

h). IPTV

A31. They should be based on technically possible parameters. For example DTH can not ensure service in heavy rain. How operator can give service. Therefore, all should have same parameters and then define exceptions and make this public for transparency.

Q32. What are the different methods to effectively increase consumer awareness?

A32. See A24.

Q33. How consumer related information can be effectively provided to Subscribers through DPO website. What minimum information should be provided through consumer corner?

A33. No comment. Simple Information about channels, rates, rules for additional connection, shift, surrender, payment, SLA etc will be enough for subscriber.

Q34. Can outsourcing to the third party for various web based operations be permitted especially for smaller DPOs? If yes, what precautions are taken to ensure that such provisions are not misused?

A34. Yes. precaution is simple — ensure SLAs, KPIs, with outsource agency as per commitment to subscriber by DPO and DPO should be responsible for regulatory framework.

Q35. In case of the use of “In Channel” communication means, what should the guidelines for running scrolls or other onscreen displays, so that it does not impact the viewing experience?

A35. No comments. The size should be limited to avoid disruption of main picture and should not be continuous as it disturbs viewer.

Q36. What options can be used for verifiability of subscriber communications for any change in service or provision of additional service?

A36. May be just 6 months as it does not matter.

Q37. What should be optimal number of channel packages which meets the subscriber demand and are well understood by the subscribers?

A37. There should not be any number for this. This varies among demographics in India.

Q38. How the package offerings can be improved in case of cable TV services so that effective choice is made available to the consumers?

A38. Since it is monopolistic situation to some extent in CATV except competition with DTH and in near future with IPTV, this issue will be taken care by competition.

Q39. How the package offerings can be improved in case of cable TV services so that effective choice is made available to the consumers?

A39. by creating competition.

Q40. Whether the choice of Pre or Post paid method should be mandatorily made available to the subscribers?

A40. Normally people don't change that fast TV channels. Hence Post paid is OK for CATV. It should not be mandatory. It can be optional. Let market drive it.

Q41. What should be the essential information contained in the monthly Bill/ Usage details to be provided to subscribers in post paid or pre- paid system?

A41. Simple as per package which are pre-defined. If complexity is created, it will add to cost and rates will go up. affordability will become an issue.

Q42. Should pre-paid method is encouraged in case of cable TV services provided though LCOs? Support your comments with justification.

A42. Fixed telecom is mostly post paid. This is similar to that. Prepaid may not be necessary. Moreover, customer may suffer.

Q43. What should be the billing cycle both for pre-paid and post paid? Please give your comments along with justification.

A43. They come and collect monthly in first week. Very simple. Let it remain simple.

Q44. Should deduction of maintenance related charges for CPE from the pre paid subscription account be prohibited?

A44. Prepaid system is not really required. AMC can be charged with the bill.

Q45. How Toll Free number and call centre details can be widely publicised among the subscriber?

A45. Through TV broadcast itself. For new customers — Mobile App and Radio.

Q46. How response time and accessibility of call centre including that of the Call centre executive can be enhanced?

A46. Like other Telecom systems. There is no difference here. SLAs with incentive and penalty take care

of performance.

Q47. Please provide your comments on the following performance parameters discussed in preceding paras related to call centre?

- a. Call centre availability hours
- b. Multiple languages in IVR
- c. Response time for answering IVR and voice to voice calls
- d. Sub menu and accessibility of customer care executive

A47. This needs case study to come out with optimum results.

Q48. What should be the timelines for complaint resolution for different type of complaints at call centre and Nodal officer level?

A48. 2 hrs for network and 1 hour for customer.

Q49. Can outsourcing of call centre and web based complaint monitoring functions to third party help in increasing efficiency and compliance levels?

A49. Yes

Q50. What should be the innovative ways to develop a speedy user friendly complaint registering and redressal framework using Mobile Apps, SMS, Online system etc.

A50. All prevailing methods. will also need 1800 service as very large number of customers have mobile and TV service but they can only talk for complaint.

Q51. What should be framework for implementation of electronic PMR?

A51. It should be must similar to Telecom. But mechanism of audit is required. In Telecom, though all reports are OK, still customers are not getting desired service. Call drop issue is well known. Parameters of performance are to be set correctly. In Telecom wrong parameters are set. 2% call drop average. If I suffer 30% call drop as individual in particular area still company will have overall average of say <1%. what will you call this. One customer who is paying extra is dead. company gains. who will support him? there is no monitoring of backhaul. if regional/national OF ring fails sometimes lakhs of customers suffer for hours. But the operators get away with this as this is not tracked and controlled by regulatory authority. Such gaps should be avoided so that customer really get for what he pays.

Q52. What should be framework for auditing of the records for QoS regulatory compliance by DPOs? Please suggest appropriate measures along with justifications.

A52. I have listed in the beginning for OF network backhaul. On similar lines this exercise is required to be done by optimising customer expectations, cost, affordable tariffs and operator's survival. The detailed study is required.

Q53. What should be framework for carrying out survey for QoS compliance and subscriber satisfaction?

A53. Refer A52.

Q54. What should be the framework and quantum for financial disincentives for non compliance to the prescribed QoS benchmarks? Please suggest appropriate measures along with justifications.

A54. After framing parameters, on similar lines as given for OF network, this can be logically designed. Also since the is to discourage the bad performance, such penalties should be published by TRAI. more than penalty companies lose on brand image. Also

incentives should be there.

Q55. Should all channels carried on the platform of a DPO must be included and shown in the EPG? Justify your comments.

A55. No comment.

Q56. Stakeholders may also provide their comments on any other issue relevant to the present consultation.

A56. As customer/subscriber of CATV and having experience of Telecom Network I am also sharing my inputs on QoS which definitely will help in working out QoS for this as now both broadcasting and Telecom are converging. The details are as under:

The snapshot on QoS (practical implementable solutions):

1. QoS is measured based on defined parameters either by customer in competitive market where it is buyer's market (for example: if I have number of options to get alternate supplier of any product or service i.e., competition is there, then the market will behave in different ways — price war or quality war or optimised quality at optimised price) or governed by TRAI/Licensor. In Indian environment on CATV it is indirect Monopoly and competition is from Satellite Dish TV companies only. In present situation the TRAI can only ensure QoS and parameters are to be set for QoS.
2. To set QoS number of parameters are to be set to ensure that customer has satisfaction and confidence in governing system.
3. To set the parameters the costing for desired QoS is to be done for CAPEX and OPEX by Governing body in this case and for the tariffs are to be worked out taking reasonable profit to the operator and the affordability by customers in Indian environment.
4. Since competition is between Dish TV and CATV is there, therefore both costs (CAPEX and OPEX) are also be worked out with possible QoS in both the cases. They should be comparable for fair competition.
5. Since the demography matters in case of CATV, the costing is to be done taking all types of demography situations — Rural, Semi-rural, towns, cities, mini metros, metros, independent houses, multi dwelling units and so on. The population density plays an important role.
6. To achieve QoS at desired tariff the installation practices and OAM practices are to be standardised. Since CATV is in monopoly and the LCOs are giving services as per affordable situation as well as taking Dish TV operators tariff as competition, they are laying the network and providing maintenance as per the collection and affordability. There are no defined specifications of installation practices, desired quality of receptions, repair time availability etc.
7. Therefore, the very first thing required before talking of QoS is setting parameters and specifications for installation practices, quality desired and minimum/maximum tariffs. This is non-existent based on my personal experience of both CATV and Dish TV in home.
8. So far it is not properly governed, but still reasonably managed by CATV and Dish TV operators. In India they have created the work force in each street/mauhalla and they have personal touch with their customers in locality. This work force is great strength to the country to only promote TV distribution, but ICT/Digital India dream of Hon. PM. This is the right time to take immediate decisions as otherwise there will be conflict between TV team and telecom team at ground level. Telecom also is embedding IPTV in the services. Over number of years as mobile grew and fixed lines reduced, the direct customer touch by telecom companies have reduced. If the strength of both TV and Telecom is synergised, then smooth convergence will be possible.
9. In Optical network by Telecom Operators. to achieve desired QoS, following parameters are normally tracked and controlled (though they vary from operator to operator as so far TRAI has not issued any performance parameter monitoring guidelines for backhaul. One of the reasons for Call Drop is lack of performance tracking guidelines by TRAI for QoS on backhaul of Telecom services. Since now convergence is taking place with ICT emergence, perhaps these parameters will be important to track and control by both Telecom and TV operators so that synergy is created and convergence is smooth. The parameters below are practically required to ensure desired QoS to ultimate customer.):
 1. Introduced two types of maintenance philosophy — Comprehensive maintenance where the contractor is responsible for certain KPIs (Key performance Indicators) with complete resources from his side and another was just hiring patrollers and having own in house maintenance teams. Slowly the focus was shifted to comprehensive maintenance philosophy. In comprehensive maintenance also some in-house emergency teams were kept. **There are incentives declared in advance in agreement for Zero cut over 1000 Kms in NLD in month and every month (if continues month on month).**
 2. To achieve that detailed planning is to be done and for that following parameters are required:
 - a. Total OFC network
 - b. Number of nodes in Ring structure and total length of OFC in ring structure. maximum size of ring.
 - c. SPOF (Single Point of failure) cases in ring structure and max length case
 - d. Number of Nodes in Linear structure and total length of OFC in linear. max length in case of linear.
 - e. Aerial OFC length out of total OF network and number of sections

- f. Present number of cuts/100 Km/month.
- g. Present MTTR
- h. Present expense/Km/month on O&M — material, services and manpower
- i. Present manpower deployed
- j. Present Fault Repair Vehicles/teams deployed.
- k. Is patrolling done presently?
- l. The present reporting system of O&M and sample report
- m. The sections where cuts are high
- n. sections where network quality is not as per standard
- o. Are they installing MH at new splicing point (cut repair)
- p. Are they making two joints at cut point?
- q. Whether ABDs are updated
- r. Do you have Video ABDs

The above inputs will help in design for O&M document.

The parameters are normally as under:

1. No of Cuts in Route:
2. MTTR
3. Repeat Cuts in the same section
4. Attenuation Level
5. Individual Splice loss
6. Total Link Loss
7. End of Life
8. Temporary to permanent joints
9. Planned outage window
10. Diversions
11. Protections
12. Updation of Data in system(ABD) and VABD
13. Cost per Km
14. Monthly reporting – **just typical figures for NLD and for city they will be different.**
 1. Fibre cut 1.5 cuts/1000 km/month Normal; Incentive 1% of AMC for 0 cut/1000km on monthly basis and 2.5% On quarterly basis. Penalty 2% for 2.5 cuts/1000 Km on monthly basis and increased to 5% between 2.5 to 4.5 cuts/1000 km on monthly basis with termination of contract if continue for 3 months.
 2. Total ring failures (where network is in ring) due to multiple fibre cut - 5% cases of fibre cuts Normal. Between 5 to 10% in a month then penalty 5%. If continuous 5-10% for 3 months then termination of contract. If 2% then incentive of 2% and if 0% then 3.5% in that month and quarterly then incentive 5% in that quarter.
 3. % of Service Affecting (SA) outages resolved in 2 hours in case of ring network - 96 normal. If 100% then incentive of 0.5% on quarterly basis. If less than 93% then penalty of 0.5% on monthly basis.
 4. %age Infra failures – 0.2 normal
 5. % repeat failing twice or more in a month due to the same reason in section – 10 Normal; If between 11 & 20 then penalty of 1% in that month. If 0% then incentive of 0.5% in that month.
 6. Fiber/Infra TTR (Time to repair) – 4 hours for 90% cases and upto 6 hours for balance 10%. Beyond 6 hours in each case penalty of Rs 8000/-. If 70 to 90% in 4 hours then penalty of Rs 4000/- for each case. If 3 cases in quarter 8 hours or more then contract termination.
 7. %age of Fiber km quality beyond specifications (EOL>0.27dB/km section-wise (node to node – average 40 Km) at 1550 nm – 5%
 8. Continuity of all fiber strands 99% section-wise during audit. If less than 99% then for each fibre penalty of Rs 5000 and correction within 3 weeks.
 9. Inventory levels (Stores >90 days) – 2% of consumables (if supplied by customer).
 10. RCA (Root Cause Analysis) for Customer Intimation within 30 minutes on the failure – 99%. If less than 99% then each case beyond 99% Rs 2000/case.
 11. Unexpected outages occurring during Planned Events (PE) – 0.2%. If more than 0.2% then each case beyond 0.2% Rs 10000/case.
 12. Successful Completion of PEs – 99% . If less than 99% then each case beyond 99% Rs 5000/case.

13. PE done without approval from all – 0.2%. If more than 0.2% then each case beyond 0.2% Rs 5000/case.
14. PE crossing the window time – 0.2%. If more than 0.2% then each case beyond 0.2% Rs 10000/case.
15. Individual splice loss -- 0.05 dB max. monthly record of cases if 5% more than 0.05 dB then penalty of Rs 100/splice for all cases. If more than 95% are less than 0.02 dB/splice then incentive of Rs 6/splice will be incentive on monthly basis.
16. Temporary to permanent joint – 5% cases allowed monthly/1000 km. If more than 5% -- each case penalty of Rs 8000/case and if it 0% then incentive of Rs 5000/quarter/1000 km.
17. **ABD (As Built Drawing)** updation within 2 working days of changes. 100%. Monthly assessment. If not then Rs 500/1000 km penalty on monthly basis. If updated 100% then incentive of Rs 500/1000 km on quarterly basis. The **Video ABDs** are required with updation on each event.
18. Proactive diversions – Cuts saved by timely action by diversion where work is going on.