

Guidelines for Audit of the Metering and Billing System and accuracy of metering and billing in License Service Area (LSA)

1 Introduction

The audit shall be conducted for metering and billing systems whether centralized or distributed, herein after called as Metering and Billing System, and accuracy of metering and billing in License Service Area (LSA) as well as records pertaining to billing including subscribed tariffs on offer and billing complaints as per regulations.

2 Empanelment of Auditors:

TRAI shall empanel Auditors for conducting audit as per the provisions of the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2023 dated xx-xx-2023.

3 Obligations of the Service Providers

3.1 Every service provider shall

3.1.1 get its Metering and Billing System and Licensed Service Areas, audited for access service, by an auditor appointed in accordance with the regulation in such a manner that –

- i. the audit of the accuracy of each Metering and Billing System at different locations/zones, is to be done before taking up the audit of any Licensed Service Area being served by that Metering and Billing System;
- ii. each of its Metering and Billing System and Licensed Service Area are audited once in a financial year;
- iii. for the purposes of audit, Metering and Billing System is to be audited first as per the schedule defined below. The audit for the Licensed Service Areas are to be uniformly distributed throughout the four quarters of the financial year.

3.1.2 submit to the Authority, every year, by the fifteenth day of May, its annual schedule of audit, containing the details of metering and billing systems and Licensed Service Areas to be audited.

3.1.3 ensure that the audit shall be conducted in accordance with the Quality of Service (Code of Practice for Metering and Billing Accuracy)

Regulation 2023 dated xx-xx-2023 and the guidelines/ checklist issued by the Authority from time to time, for various services provisioned and rendered by the service providers to their subscribers.

- 3.1.4 provide to the auditor, within fifteen days of receipt of request, the raw call data records pertaining to service usage.
- 3.1.5 provide to the auditor, within seven days of receipt of request, the addresses of the metering and billing systems with details of LSAs being served by it, and LSA(s) offered for audit with contact details of the nodal officers in charge for this audit and other relevant documents as may be required by the auditor, for the conduct of audit.
- 3.1.6 carryout self-check of their Metering and Billing System and billing accuracy on regular intervals to find out deviations if any, and take corrective actions to set right such deviations immediately.
- 3.1.7 ensure that empaneled auditors are facilitated in the conduct of audit.
- 3.1.8 provide access to the Metering and Billing System or any other node(s) relevant for the purpose for audit and documents upon request from the auditors.
- 3.1.9 provide to the auditors, on every audit observations, written comments or clarifications with necessary documents and/or system-generated records in the given time frame. The detailed comments shall include-
 - i. reasons for occurrence of the problem;
 - ii. date of occurrence of the problem; and
 - iii. date of rectification of the problem.
- 3.1.10 submit the audit report to the Authority as per the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2023 dated xx-xx-2023.
- 3.1.11 submit the action taken report to the Authority as per the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2023 dated xx-xx-2023, on each audit observation containing therein

the details of the action taken on audit observations, and such details shall include-

- i. reasons for occurrence of the problem;
- ii. date of occurrence of the problem;
- iii. date of rectification of the problem;
- iv. action taken to address the problem;
- v. number of subscribers affected in respect of cases where overcharging was observed by auditor and the total amount involved;
- vi. number of such subscribers to whom refunds were made within time limit specified in the regulation 6 and 7 and the total amount so refunded; and
- vii. the number of the subscribers to whom refunds could not be made and total amount which could not be refunded,
- viii. the number of the subscribers to whom refunds was made after time limit and total amount which was refunded
- ix. status of audit observations pending to be resolved from previous audits, in such format as the Authority may prescribe from time to time.

4 Guidelines for Auditors

- 4.1 The Auditors shall undertake audit of the Metering and Billing System of service provider before LSA audit. The audit of LSAs shall be taken up only after completion of audit of its Metering and Billing System.
- 4.2 Based on Audit methodology, LSA audit activities may have two components i.e. (a) activities which may be conducted centrally after the system audit of Metering and Billing System and (b) activities which require onsite visits to LSAs based on service providers' network, Metering and Billing System deployment. The Auditors may consider this aspect in overall audit activities schedule and communicate the same to the service providers clearly.

4.3 Auditors' Obligations:

- 4.3.1 The Auditors shall undertake audit of the Metering and Billing System of service provider and certify that service providers' Metering and Billing System **is in compliance** with the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2023 dated xx-xx-2023 and guidelines and direction(s) issued by the Authority from time to time. The Auditors shall further take up audit of accuracy of metering and billing in License Service Area (LSA) as per the prescribed Audit Methodology.
- 4.3.2 The Auditors shall strictly adhere to the schedule of audit as specified in the regulations and notify TRAI, before it begins the audit process.
- 4.3.3 The Auditors may associate revenue assurance experts/ solutions in their audit work. However, such experts should not be associated with revenue assurance solutions of concerned service provider. TRAI shall be intimated forthwith the details of arrangement, if any, with revenue assurance experts with their current associations with service providers.
- 4.3.4 The Auditors shall maintain confidentiality of information/data shared by service providers for conduct of audit and may be required to sign a non-disclosure agreement with service providers, if required.
- 4.3.5 The Auditors shall comply with all the regulations, directions, instructions, guidelines etc. issued by TRAI from time to time for the purpose of conducting the audit and reporting thereof.
- 4.3.6 Auditors shall not undertake audit of the metering and billing system of any service provider to whom the auditor is/has been also statutory auditor or internal auditor since last two financial year (year prior to the audit year) or have any conflict of interest in fair conduct of audit.
- 4.3.7 The Auditors shall promptly report to the Authority any critical matters/ observations noticed/ noted while conducting audit of metering and billing system of any service provider.
- 4.3.8 The Authority may refer complaints relating to metering, billing, value added services etc. for verification and inclusion of findings in the audit report.
- 4.3.9 Auditors may be asked to give detailed presentation covering key findings of audit including the process/procedure adopted for the

audit. The auditor shall attend such meetings/ presentation at their own expenses.

4.3.10 The Auditors shall expeditiously submit a copy of the report(s) to the authority on completion of the audit.

4.3.11 If an auditor fails to comply with the provisions of these regulations and direction or guidelines issued from time to time, the auditor shall be liable to be removed from the panel of the auditors:

Provided that reasonable opportunity shall be given to the auditor before removal from panel.

4.4 Audit Methodology

The Auditors shall follow the audit methodology provided in **Appendix-I** of these guidelines for conduct of audit.

4.5 Submission of Audit Report

4.5.1 The Auditors shall prepare the audit report for the Metering and Billing System as well as LSAs audited for the quarter, expeditiously in the format prescribed by the Authority as per the specified schedule.

4.5.2 The Auditors shall not delay the preparation of the audit report, waiting for the comments of the service provider on any audit observation.

4.5.3 After completion of audit of the Metering and Billing Systems as well as License Service Area (LSA) the Auditors shall submit Audit report and key findings of the audit to TRAI.

4.5.4 The areas of concern identified during audit shall be categorized into three categories as described below:

- i. **Category 1 (Non-Compliance):** An important matter of non-compliance or deficiency for which corrective action must be undertaken urgently. In view of the grave consequences of a Category 1 matter, it is expected that a service provider shall resolve it as a matter of utmost importance. In any event a detailed corrective action plan must be agreed within one month and put into effect immediately.

- ii. **Category 2 (Deficiency):** A matter of concern, which is to be resolved within a period, agreed with the Auditors. In any event a detailed corrective action plan must be agreed and put into effect within three-months.
- iii. **Category 3 (Observations):** A matter worthy of consideration by the service provider, possibly leading to corrective and/ or preventative action, but not of sufficient importance to warrant Category 1 or 2 status.

4.5.5 The Audit report shall, inter-alia, cover following details:

- i. Brief overview of Metering and Billing System or LSA as applicable
- ii. Key findings or observations
- iii. Instances of overcharging, service provider's comments and final remarks of Auditors in such format and at such intervals as the Authority may prescribe from time to time.
- iv. Action taken by the service provider on the overcharging reported under regulation 6 and 7 and verification thereof including his opinion with reasons thereto.
- v. Comments of the service provider against each audit observation and auditor's opinion on these comments.
- vi. Non-acceptance of audit observation by the service provider, if any, along with service provider's comments thereon.
- vii. Observations on compliance to the code of practice by service provider for metering and billing accuracy laid down in the regulation.
- viii. Other relevant details as specified by Authority time to time.

4.6 Miscellaneous

During the audit, TRAI may entrust the auditor to undertake special audit on any issue. The auditor shall undertake audit on such issue and shall report to TRAI about the findings of such audit in such format and in such time frame as specified by TRAI in this regard.

5 Schedule of activities and submission of Reports

5.1 Timeline for Audits and submission of reports:

Sr No	Report	Responsibility	Timeline
1	System Audit		
1(a)	Audit of all the Metering and Billing Systems	Auditor	By 31 st July
1(b)	Audit report of the Metering and Billing System audited	Auditor	By 21 st August
		Service Provider	By 31 st August
1(c)	Action Taken Report*	Service Provider	Within two months of audit report submission i.e., by 31 st October.
2.	LSAs Audit for accuracy of metering and billing		
2(a)	Audit report of the LSAs audited	Service Provider	By the end of next quarter for the LSAs audited. e.g.: For the LSAs audited, for quarter ending June, audit report is to be submitted by 30 th September.
2(b)	Action Taken Report*	Service Provider	Within two months of audit report submission. e.g.: For the LSAs audited for quarter ending June, action taken report is to be submitted by 30 th November.
2(c)	Key findings of the audit	Auditor	By the end of next quarter for the LSAs audited. e.g.: for the quarter ending June, Key finding of Audit to be submitted by 30 th September.

*Action taken report shall also include the status of all pending audit observations of previous quarters, if any.

5.2 Timeline of audit activities:

S No	Activity	Apr-June	Jul-Sept	Oct-Dec	Jan-Mar
1	Appointment of auditor	By 30 th April			
A	Audit of all the Metering and Billing Systems, Centralized or Distributed				
2	Information, pertaining to the Metering and Billing System to be provided by the service provider to the auditor#	By 15 th May for audit of each Metering and Billing System			
3	Completion of System Audit	Once in a year for each Metering and Billing System, before taking up the audit of any Licensed Service Area being served by that Metering and Billing System. Schedule- as defined in table at para 5.1 above.			
B	LSAs Audit for accuracy of metering and billing				
4	Appointment of Nodal officer and Submission of Schedule of LSA Audit to TRAI by service provider agreed with Auditor	By 15 th May			
5	Information, pertaining to the LSAs being audited for metering and billing accuracy, to be provided by the service provider to the auditor\$	By15 th July	By15 th Oct	By15 th Jan	By15 th Apr
6	The auditor shall also prepare separate Annexure-I-AA to I-DA for all the tariff	By15 th July	By15 th Oct	By15 th Jan	15 th Apr

	offerings based on the information filed to TRAI by the service provider				
7	Sampling as per the provisions of the regulation/ guideline and sharing of related information to the Auditor	By 22 nd Aug	By 22 nd Nov	By 22 nd Feb	By 22 nd May
8	Auditor will complete the audit and submit the Audit report to the service provider	By 22 nd Sept	By 22 nd Dec	By 22 nd Mar	By 22 nd Jun
9	Audit report Submission to TRAI by the service provider	By 30 th Sept	By 31 st Dec	By 31 st Mar	By 30 th June
10	Submission of key findings of the audit to TRAI by the auditor	By 30 th Sept	By 31 st Dec	By 31 st Mar	By 30 th Jun
11	Action Taken Report Submission to TRAI by the service provider	By 30 th Nov	By 28 th /29 th Feb	By 31 st May	By 31 st Aug

Information includes-

- (i) Certificate that service provider has completed the self- evaluation of the metering and billing system(s), being audited.
- (ii) Audit report, ATR and details of pending action points of previous year/ quarters

\$ Information includes-

- (i) Certificate that service provider has completed the self- evaluation of the LSA for metering and billing accuracy.
- (ii) Details of outstanding amount to be refunded to subscribers in the LSA as on last day of the quarter.
- (iii) Details of all tariff offerings in Annexure-I-A to I-D for LSAs being audited.
- (iv) Details of all billing complaints received during the quarter
- (v) Audit report, ATR and details of pending action points of previous year/ quarters

Audit Methodology

- 1 The Auditors shall undertake the audit of metering and billing systems of the service providers, both for prepaid and postpaid subscribers of access service provided on wire line and wireless media, in accordance with the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2023 dated xx-xx-2023 and the guidelines/ directions issued by the Authority from time to time.
- 2 The auditor shall evaluate, inter alia, the correctness of the following during the audit:
 - 2.1 The generation process of the Call Data Records (CDR) by the nodes responsible for metering, billing and applications of policy rules, if any.
 - 2.2 The software logic of the IT nodes and systems deployed by service providers for testing the configuration of tariff plans and all kinds of vouchers before launch, encompassing all use case scenarios of the application of different tariff plans and vouchers subscribed.
 - 2.3 The correctness of CDR vis-à-vis the rate applied, duration mentioned, origination and destination codes.
 - 2.4 Compliance to Regulations, Telecom Tariff Orders, Directions, orders, and instructions issued by Authority as amended from time to time. The current list of the same, as on date, is available in **Annexure II** which may be amended in future.
 - 2.5 The Auditor is free to use and verify the correctness of configuration check mechanism of the tariff of the service providers, using their own tools and testing software.
- 3 **Pre-Audit Activities:** The Auditors shall
 - 3.1 familiarize with the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation, 2023 dated xx-xx-2023, associated guidelines/ instructions/ directions and various tariff orders, directions and other regulations issued by the Authority from time to time.
 - 3.2 obtain the details of Nodal Officer(s) of Service Provider who are authorized for coordinating the audit activities, furnishing of records and reply to the audit observations.
 - 3.3 obtain list of each metering and billing and policy/rules configurations system, along with details of its location, LSAs

served and other relevant details required for smooth conduct of audit.

- 3.4 collect the details of outstanding amount, to be refunded to the subscribers, from the service provider and verify the same or any other relevant details for conduct of audit.

4 Audit of Centralized/Distributed Billing System

- 4.1 The service provider shall ensure that audit of its metering and billing system, either centralized or distributed at different locations, is done before taking up audit of any license service area being served by that metering and billing system.
- 4.2 The service provider shall, before the audit, conduct a self-evaluation of the metering and billing system(s) to be audited for the concerned quarter and take corrective actions, if any, to set right discrepancies/ instances of overcharging observed if any during such evaluation.
- 4.3 The service provider shall submit a certificate in this regard for the metering and billing system(s) being audited to the auditor within 15-days of the quarter ending for which audit is being done.
- 4.4 To ensure accuracy of metering and billing systems, auditor shall conduct audit of various processes and configurations defined in centralized and/or distributed metering and billing systems of the service providers before taking up LSA wise audit. While auditing centralized systems auditor shall check following broad processes, not limited to the listed below:
 - 4.4.1 flow of CDR/ IPDR from CDR/IPDR generating nodes to central billing system and their processing in mediation systems
 - 4.4.2 rating methodologies defined in billing systems to rate CDRs for billing
 - 4.4.3 policy definitions if any, done for fair use or any other policies as applicable to the tariff offering and their impact on rating processes both for Post Paid and Pre-Paid subscribers.
 - 4.4.4 billing methodologies for Value Added Services and their rating in the system both for Post Paid and Pre-Paid subscribers
 - 4.4.5 for Prepaid System processes for Online Charging Mechanism for various kinds of usage by the subscribers

- 4.4.6 applicability of tariff offering through e-charging/portal charging /app based and/or physical charging systems to the subscriber's account
- 4.4.7 applicability of credit mechanism, if any, applied to subscribers through third party offering
- 4.4.8 subscriber's balance management including grace periods management, if any applicable
- 4.4.9 top-up and carry forward mechanism for tariff offering allowing auto refilling of subscriber's account after predefined intervals (Ex- daily 1GB usage or 100 minutes calls or 100 SMSs etc.)
- 4.4.10 any other offers not listed above but applicable to the subscribers.

5 Audit of Centralized/Distributed Metering System

- 5.1 The auditor shall check metering and mediation process by making sample test calls to ascertain that metering and mediation process is accurate and no systematic deficiency noticed.
- 5.2 Accuracy of measurement of metering shall be checked by simulating conditions of various services being rendered such as making test voice calls, sending messages, and establishing data sessions, provisioning VAS service etc., using test numbers. Such verification shall be done in at least five network elements/ nodes of the LSA, generating CDR/ IPDR and also responsible for policy definitions (like fair usage applications, daily data volume limits etc.). These network elements/ nodes should be distinct and geographically spread across the LSA. Preference should be given to newly commissioned network elements/ nodes. The testing/ verification shall be done by making at least 10 test calls per network element/ node covering various services viz. voice calls/ messages/ data sessions, VAS services etc., as applicable.
- 5.3 The auditor shall compare the duration/ count/ time/ volume of data of test voice calls/messages/ data sessions/ VAS recorded in the raw CDRs/ IPDRs with the corresponding values measured by the software or equipment, used for making such test voice calls/ messages/ data sessions/ VAS, using standard/ established techniques.
- 5.4 The accuracy of measurements should be within the limit prescribed in the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2023 dated xx-xx-2023. The

findings shall be recorded in the audit report along with the details of the test voice calls/ messages/ data session made.

6 Audit of the LSAs

6.1 STEP-1

6.1.1 Every service provider shall submit the details of all outstanding amounts, to be refunded to the subscribers, at the beginning of the financial year for all LSAs to the Authority and the Auditors.

6.1.2 Every service provider shall, before the audit, conduct a self-evaluation of the Licensed Service Areas to be audited for metering and billing accuracy, for the concerned quarter. The service provider shall take corrective action, if any, to set right discrepancies/ instance of overcharging observed if any during such evaluation. Refunds if applicable should also be made within specified time to the affected subscribers. Further, a statement on the outstanding amount at the start of the financial year and amount refunded till previous quarter of the audit is to be submitted by the service provider to the Auditor.

6.1.3 The service provider shall submit a certificate in this regard, for all LSAs being audited, to the auditor within 15-days of the quarter ending for which audit is being done.

6.1.4 The service provider shall submit the details of updated outstanding amount, to be refunded to the subscribers, at the end of quarter for the LSAs being audited, to the auditor. The auditor shall verify the same during audit.

6.2 STEP-2

6.2.1 The auditor shall obtain the details of all the tariff offerings (excluding Service Level Agreement based tariff offerings) viz. tariff plans, Plan Vouchers, Special Tariff Vouchers (STVs), Combo Vouchers (CVs), Top Up Vouchers (TUVs), Add-on plans offered to prepaid and postpaid subscribers of access service provided on wireline and wireless media, as per the format prescribed in Annexure- I-A to I-D, whichever is applicable, from the service provider.

6.2.2 The service provider shall provide the information as per the tariff configured in the system. A certificate stating that there is no discrepancy in the information provided in Annexure- I-A to I-D and that configured in the system for

metering and billing of/to the subscribers, shall be submitted by the service provider to the auditor.

6.2.3 Details of all such tariff offerings, fulfilling one or more criteria, as mentioned below, shall be included in the Annexure- I-A to I-D:

- i. available for subscription as on last day of the quarter for which audit is being done;
- ii. having at least one active subscriber at the beginning of the quarter for which audit is being done;
- iii. having at least one active subscriber at the end of the quarter for which audit is being done;
- iv. subscribed by at least one subscriber during the quarter for which audit is being done;

6.2.4 The auditor shall also prepare separate Annexure- I-AA to I-DA, similar to Annexure- I-A to I-D, for all the tariff offerings based on the information filed to TRAI by the service provider.

6.2.5 The auditor shall verify the details of all tariff offerings configured in the systems and provided by the service provider in Annexure- I-A to I-D with the details of tariff offerings prepared by the auditor in Annexure- I-AA to I-DA. Any inconsistency including missing information shall immediately be brought to the notice of the service provider for taking necessary corrective action, under intimation to TRAI. The findings shall be recorded in the audit report.

6.3 **STEP-3**

6.3.1 The service provider shall categorise all tariff offerings, while submitting the details to the auditor in Annexure- I-A to I-D, under various groups after analysing the likely impact of the tariff offering on various service components viz. call, data, message, ISD call rate, call rate in international roaming, monetary value, validity, value added services etc.

6.3.2 The groups so formed, shall be the broad categories from which representative sample of tariff offerings are to be selected for audit. An indicative list of various groups is as follows:

Group Number	Group having impact on
A	Call + Message + Data + Monetary value
B	Call + Message + Data
C	Call + Data+ Monetary value
D	Call + Message
E	Call + Data
F	Call
G	Data
H	Monetary value
I	Call + Message+ Data in International Roaming
J	Call + Message in International Roaming
K	Call+ Data+ Value Added Services

Note: The list is an indicative only and not exhaustive. More groups can be formed based on tariff offerings of the respective service provider.

- 6.3.3 All the tariff offerings in each annexure, are to be clubbed in groups irrespective of whether it is a tariff plan, plan voucher, special tariff voucher (STV), combo voucher (CV), top up vouchers (TUV), add-on plan etc.
- 6.3.4 From each group of each annexure, five most popular tariff offerings or all tariff offerings under a particular group whichever is less, shall be selected by the auditor for audit. Selection of tariff offerings for audit shall be done judiciously considering various parameters viz. number of active subscribers at the beginning of the quarter; number of active subscribers at the end of the quarter; subscription count for the tariff offering during the quarter etc. Auditor shall also record the justification, in audit report, against each tariff offering for selection or non-selection for the five most popular tariff offerings, in the respective annexures.
- 6.3.5 In case of bundled offers with unlimited services for specific period, say daily, monthly or yearly basis, the tariff voucher is to be associated with the group mapping with

type of services offered in unlimited plan or a fresh group may be created for the same. Examination of samples collected thereof needs to be done in accordance with the configuration of the tariff in the Billing System. Deviations in terms of volume or cost if any, need to be identified and applied to all such similarly placed subscribers to arrive quantum of compensations to be paid to the subscribers. *(Illustrations: Suppose a bundled offer with unlimited Voice Calls, SMS and 1GB data per day, if priced say at Rs 300 for 30 days with all services operating on Data bearer, is providing lesser data (say upto 900 MB per day) to a consumer. The overcharging may be calculated based on proportionate charging basis for the total quantum of less data provided in the month.) i.e (100*30= 3000 MB=3GB, price over charged= 3*300/30=Rs 30) . Further, in case of a particular service say Voice or SMS is not working, the service provider may either provide details of configurations distinguishing data usage for each service or else proportionate calculation based on total time frame in which a particular service was not available and quantum of total data which could have been used for availing such services, shall be done as per above illustrations)*

- 6.3.6 However, the compliance of the regulations needs to be demonstrated only in relation to tariff offerings having material impact on the subscriber's bill. This materiality is deemed to be-
- i. where the service provider's revenue from a tariff offering accounts for 5% or more of its total revenue from all the subscribers in the respective groups formed for sampling; or
 - ii. where the number of subscribers subscribing to a tariff offering offered by the service provider comprises 5% or more of the total subscriber base in the respective group formed for sampling; or
 - iii. at the specific direction of the TRAI.

Provided that the above materiality provisions shall not be applicable to any tariff offering having an impact on tariff of international call/ messages or call/ message/ data during international roaming.

- 6.3.7 The auditor shall collect the list of active subscribers at the end of the quarter under audit in all the five most popular tariff offerings from each group of each annexure, as selected above, from service providers.
- 6.3.8 The auditor shall select minimum of 1067 subscribers (in order to achieve a confidence level of 95% with margin of error of 3% for any population size) or total subscriber base of the group whichever is lower, on random basis, from each group in each annexure (I-A to I-D), provided the samples from five most popular tariff offerings are selected in proportion to their subscriber base.
- 6.3.9 Auditor shall also ensure that the random samples selected under each group are unique and same are not already covered in another group. In case of repetition of samples, equal number of new samples may be selected so that count of total samples remains unchanged.
- 6.3.10 In case, any tariff offerings viz. tariff plans, plan vouchers, special tariff vouchers, combo vouchers, top up vouchers, add-on plans are offered in multiple LSAs with exactly same configurations from same metering and billing system, then the auditor may audit such tariff offers in one of the LSAs and in remaining LSAs alternate tariff offering of the same group may be selected for auditing of five most popular tariff offering of a group.
- 6.4 **STEP-4**
- 6.4.1 The auditor shall also undertake backward reconciliation of billing complaints both for post-paid and pre-paid subscribers to establish correctness of metering and billing system.
- 6.4.2 The auditor shall select 100 billing complaints or 10% of the total billing complaints registered during the quarter, whichever is lower, on random basis. The auditor shall analyse these complaints in detail along with its resolution provided by the service provider. The auditor shall also confirm whether the subscribers are satisfied with the resolution provided, by making check back call to the respective subscriber. All the randomly selected subscribers, for audit of billing complaint, shall also be included for CDR/ IPDR audit. A log of such calls records made by the auditors shall be maintained along with

calling number, called number, time and duration of call etc and shall be submitted in case desired by the Authority.

6.5 STEP-5

- 6.5.1 CDRs/ IPDRs/other service usage records etc. of all the subscribers as selected in step-3 and step-4 above shall be audited.
- 6.5.2 The auditor shall collect one-month raw CDRs/ IPDRs of all such subscribers. One month period shall coincide with the billing period for postpaid subscribers and plan cycle for prepaid subscribers.
- 6.5.3 In addition to collection of raw CDRs/ IPDRs, following details shall also be collected from the service provider:
 - i. For **postpaid subscriber**: Bill of the corresponding period, account details of the subscriber at the beginning and end of the respective month along with changes, if any, during the month and details of policy applied, if any.
 - ii. For **prepaid subscriber**: account details of the subscriber at the beginning and ending of the month, all service/ recharge related transaction details viz. denomination, validity, attributes etc with respect to the application of voucher (PV/STV/CV etc), charges deducted for each CDRs/ IPDRs during the month for which CDR/ IPDR is demanded and details of policy applied, if any.

6.6 STEP-6

- 6.6.1 The auditor shall rate the CDRs/ IPDRs of each subscriber as per its subscribed plan and details of plan filed to TRAI by the service provider and compare the same with the bill (for postpaid subscribers) and charges deducted (for prepaid subscribers).
- 6.6.2 The audit shall also include the verification of applying credits to the account (as per clause 5 of code of practice for metering and billing accuracy), application of top up voucher, charges related to VAS services, application of Fair/ Commercial Usage policies (FUPs/CUPs) in accordance with tariff offerings, service continuation till credit limit accorded to subscriber etc.

- 6.6.3 The auditor shall analyse the discrepancy, if detected, and find out the root cause of the same. All overcharging instances observed during the audit shall be reported to the service provider immediately.
- 6.6.4 The auditor shall also verify successful implementation of the corrective action.

(Illustrative examples of various group formation and drawing samples are given at Annexure-III)

DRAFT

Annexure-I-A **Format for collection of different tariff offerings of Wireless Prepaid**

TSP:

Quarter:

LSA:

	Product sub category	Sno.	Unique Record ID	Product Name as per TSP	Unique Plan ID (by TSP), if any	Regular/Promotional	Date of reporting to TRAI	Launch/Revision/Correction/Withdrawal	Start date	Unique Record ID of Old tariff	Date of withdrawal	Price (Including Processing Fee & GST)	Talktime (in Rs.)	Validity (in Days)	Call (Local)	Call (STD)	Call (ISD)	Call (Incoming in National Roaming)	Call (Local Outgoing in National Roaming)	Call (STD Outgoing in National Roaming)	Call (ISD Outgoing in National Roaming)		
i	Plan Voucher	1																					
		2																					
		3																					
ii	STV	1																					
		2																					
		3																					
iii	Combo Voucher	1																					
		2																					
		3																					
iv	Top Up Voucher	1																					
		2																					
		3																					
v	Prepaid VAS	1																					
		2																					
		3																					
vi	Prepaid Promo	1																					
		2																					
		3																					
vii	Prepaid International Roaming	1																					
		2																					
		3																					
viii	Pre-paid SUK	1																					
		2																					
		3																					

Annexure-I-B **Format for collection of different tariff offerings of Wireless Postpaid**

TSP:

Quarter:

LSA:

	Product sub category	Sno.	Unique Record ID	Product Name as per TSP	Unique Plan ID (by TSP), if any	Regular/Promotional	Date of reporting to TRAI	Launch/Revision/Correction/Withdrawal	Start date	Unique Record ID of Old tariff	Date of withdrawal	Installation/Activation Charges (if any)	Security Deposit (Int Roaming)	Security Deposit (Any other)	Monthly Rental (Excluding GST)	Validity (in Days)	Call (Local)	Call (STD)	Call (ISD)	Call (Incoming in National Roaming)	Call (Local Outgoing in National Roaming)		
i	Postpaid Plan	1																					
		2																					
		3																					
ii	Postpaid Addon Pack	1																					
		2																					
		3																					
iii	Postpaid VAS	1																					
		2																					
		3																					
iv	Postpaid International roaming	1																					
		2																					
		3																					
v	Postpaid Promo	1																					
		2																					
		3																					

Annexure-I-A

	Product sub category	Sno.	Call (Incoming in Int Roaming)	Call (Local Outgoing in Int Roaming)	Call (ISD Outgoing in Int Roaming)	Message (Local)	Message (National)	Message (International)	Message (In National Roaming)	Message (In Int Roaming)	Data - Home (including FUP)	Data- In National Roaming (including FUP)	Data- In Int Roaming (including FUP)	Data carry forward limit (in days/ months)	Value added service	Any other service (please specify)	Active for offering to new subscribers as on last day of the quarter (Y/N)	Number of Active Subscribers as on first day of the quarter
i	Plan Voucher	1																
		2																
		3																
ii	STV	1																
		2																
		3																
iii	Combo Voucher	1																
		2																
		3																
iv	Top Up Voucher	1																
		2																
		3																
v	Prepaid VAS	1																
		2																
		3																
vi	Prepaid Promo	1																
		2																
		3																
vii	Prepaid International Roaming	1																
		2																
		3																
viii	Pre-paid SUK	1																
		2																
		3																

Annexure-I-B

	Product sub category	Sno.	Call (STD Outgoing in National Roaming)	Call (ISD Outgoing in National Roaming)	Call (Incoming in Int Roaming)	Call (Local Outgoing in Int Roaming)	Call (ISD Outgoing in Int Roaming)	Message (Local)	Message (National)	Message (International)	Message (In National Roaming)	Message (In Int Roaming)	Data - Home (including FUP)	Data- In National Roaming (including FUP)	Data- In Int Roaming (including FUP)	Data carry forward limit (in days/ months)	Value added service	Any other service (please specify)
i	Postpaid Plan	1																
		2																
		3																
ii	Postpaid Addon Pack	1																
		2																
		3																
iii	Postpaid VAS	1																
		2																
		3																
iv	Postpaid International roaming	1																
		2																
		3																
v	Postpaid Promo	1																
		2																
		3																

Annexure-I-A

	Product sub category	Sno.	Number of Active Subscribers as on last day of the quarter	Subscription count during the Quarter	Groups based on tariff offerings	Group description	Tariff plan selected for Audit (Y/ N)	Justification for selection / non-selection of the tariff plan by the Auditor	Number of subscribers selected for Audit
i	Plan Voucher	1							
		2							
		3							
ii	STV	1							
		2							
		3							
iii	Combo Voucher	1							
		2							
		3							
iv	Top Up Voucher	1							
		2							
		3							
v	Prepaid VAS	1							
		2							
		3							
vi	Prepaid Promo	1							
		2							
		3							
vii	Prepaid International Roaming	1							
		2							
		3							
viii	Pre-paid SUK	1							
		2							
		3							

Annexure-I-B

	Product sub category	Sno.	Active for offering to new subscribers as on last day of the quarter (Y/N)	Number of Active Subscribers as on first day of the quarter	Number of Active Subscribers as on last day of the quarter	Subscription count during the Quarter	Groups based on tariff offerings	Group description	Tariff plan selected for Audit (Y/ N)	Justification for selection / non-selection of the tariff plan by the Auditor	Number of subscribers selected for Audit
i	Postpaid Plan	1									
		2									
		3									
ii	Postpaid Addon Pack	1									
		2									
		3									
iii	Postpaid VAS	1									
		2									
		3									
iv	Postpaid International roaming	1									
		2									
		3									
v	Postpaid Promo	1									
		2									
		3									

Annexure-I-C

Format for collection of different tariff offerings of Wireline Prepaid

TSP:

Quarter:

LSA:

	Product sub category	Sno.	Unique Record ID	Product Name as per TSP	Unique Plan ID (by TSP), if any	Regular/Promotional	Date of reporting to TRAI	Launch/Revision/Correction/Withdrawal	Start date	Unique Record ID of Old tariff	Date of withdrawal	Installation/Activation Charges (if any)	Security Deposit (Int Roaming)
i	Fixed Line plan	1											
		2											
		3											
ii	Addon pack	1											
		2											
		3											
iii	Gen ISD	1											
		2											
		3											

Annexure-I-D

Format for collection of different tariff offerings of Wireline Postpaid

TSP:

Quarter:

LSA:

	Product sub category	Sno.	Unique Record ID	Product Name as per TSP	Unique Plan ID (by TSP), if any	Regular/Promotional	Date of reporting to TRAI	Launch/Revision/Correction/Withdrawal	Start date	Revision/Correction date	Unique Record ID of Old tariff	Date of withdrawal	Installation/Activation Charges (if any)
i	Fixed line Plan	1											
		2											
		3											
ii	Addon pack	1											
		2											
		3											
iii	Gen ISD	1											
		2											
		3											

Annexure-I-C

	Product sub category	Sno.	Security Deposit (Any other)	Price (Including Processing Fee & GST)	Talktime (in Rs.)	Validity (in Days)	Call (Local)	Call (STD)	Call (ISD)	Message (Local)	Message (National)	Message (International)	Data (including FUP)	Data carry forward limit (in days/ months)	Value added service	Any other service (please specify)
i	Fixed Line plan	1														
		2														
		3														
ii	Addon pack	1														
		2														
		3														
iii	Gen ISD	1														
		2														
		3														

Annexure-I-D

	Product sub category	Sno.	Security Deposit (Int Roaming)	Security Deposit (Any other)	Monthly Rental (Excluding GST)	Validity (in Days)	Call (Local)	Call (STD)	Call (ISD)	Message (Local)	Message (National)	Message (International)	Data (including FUP)	Data carry forward limit (in days/ months)	Value Added Service	Any other service (please specify)
i	Fixed line Plan	1														
		2														
		3														
ii	Addon pack	1														
		2														
		3														
iii	Gen ISD	1														
		2														
		3														

Annexure-I-C

	Product sub category	Sno.	Active for offering to new subscribers as on last day of the quarter (Y/N)	Number of Active Subscribers as on first day of the quarter	Number of Active Subscribers as on last day of the quarter	Subscription count during the Quarter	Groups based on tariff offerings	Group description	Tariff plan selected for Audit (Y/ N)	Justification for selection / non-selection of the tariff plan by the Auditor	Number of subscribers selected for Audit
i	Fixed Line plan	1									
		2									
		3									
ii	Addon pack	1									
		2									
		3									
iii	Gen ISD	1									
		2									
		3									

Annexure-I-D

	Product sub category	Sno.	Active for offering to new subscribers as on last day of the quarter (Y/N)	Number of Active Subscribers as on first day of the quarter	Number of Active Subscribers as on last day of the quarter	Subscription count during the Quarter	Groups based on tariff offerings	Group description	Tariff plan selected for Audit (Y/ N)	Justification for selection / non-selection of the tariff plan by the Auditor	Number of subscribers selected for Audit
i	Fixed line Plan	1									
		2									
		3									
ii	Addon pack	1									
		2									
		3									
iii	Gen ISD	1									
		2									
		3									

A. Regulations

1. Telecom Consumer Protection Regulations, 2012-

Regulations:

- 3 *Start-Up Kit*
- 4 *Vouchers*
- 6 *Information to pre-paid consumers on activation of a voucher*
- 7 *Information to pre-paid consumers relating to usage*
- 8 *Past Usage details in respect of pre-paid mobile connections*
- 10 *Information to customers on premium rate and value-added services, data usage etc.*
- 15 *Communication of information to the consumer*
- 17 *Default status of international mobile roaming service*
- 18 *Information to consumers on activation of international mobile roaming service*
- 19 *Information to consumers on selection of tariff*
- 20 *Information to consumer as soon as the mobile equipment is switched on by the consumer in the visiting country*
- 21 *Information to consumers at different stages of exhaustion of entitled data usage while roaming internationally as per the selected tariff*
- 22 *Information to the consumer who may initiate use of international mobile roaming service in a country or area not covered by the tariff subscribed or where the applicable tariff differs from the subscribed tariff*
- 23 *Establishment of facility for providing information about the account of the consumer while roaming internationally*

2. Telecom Consumers Complaint Redressal Regulations, 2012-

Regulations:

- 3 *Establishment of Complaint Centre*
- 4 *Setting up of General Information Number*
- 17 *Publishing of Telecom Consumers Charter by the Service Provider*

3. The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service Regulations, 2009

Regulation:

3(ii) Rent Rebate

4. Telecommunication Consumers Education and Protection Fund (TCEPF), Regulations, 2007

Regulations:

3 Excess amount collected by the service providers from the subscribers to be transferred to TCEPF in certain cases.

B. Telecom Tariff Order, 1999, as amended from time to time

Clause 6 Flexibility and Packages

Clause 9 Publication of Tariffs

Clause 11 Terms and Conditions

C. Directions

1. Direction dated 15.03.2001, on Migration fees while changing service provider
2. Direction dated 27.06.2005, on credit limit for postpaid subscribers
3. Direction dated 29.06.2005, on intimation to customers about the plan subscribed
4. Direction dated 12.09.2005 on Value added services
5. Direction dated 16.09.2005, on tariffs advertised with misleading titles
6. Direction dated 07.06.2006 on credit limit for postpaid subscribers
7. Direction dated 23.08.2007, relating to tariff plans with misleading titles and amending the direction dated 16.09.2005
8. Direction dated 27.04.2009, on provision of value-added services to customers
9. Direction dated 04.09.2009, on provision of value-added services to customers and amending the direction dated 27.04.2009
10. Direction dated 26.03.2012 on tariff advertisements
11. Direction dated 27.07.2012, on providing adequate information to broadband subscribers for maintaining transparency
12. Direction dated 14.09.2012, on charging of SMS on blackout days
13. Direction dated 18.09.2020 on tariff publication

14. Direction dated 18.09.2020, on tariff advertisements
15. Direction dated 22.10.2020 on tariff publication (amendment of the direction dated 18.09.2020)
16. Clarification issued on 22.10.2020, for direction dated 18.09.2020
17. Direction dated 02.09.2021, to ensure that only the tariffs reported to TRAI are being offered
18. Direction dated 07.12.2021, on enabling outgoing SMS facility to customers who are porting out

DRAFT

Annexure-III

Illustrative Examples of Group Formations of Tariff Offering and Sampling of Subscribers

1. Grouping of Tariff Offerings

Product sub category	Product Name	Tariff summary	Group description	Groups based on tariff offerings
Plan Voucher	PV 154	600 Local (on TSP's NW) night Minutes + 2.5p/Sec call Rate; 180 days Validity First 100 Local + National SMS free every day, thereafter, default tariff rates continue to be applicable	Call+ Message	D
Plan Voucher	PV 154	600 Local (on TSP's NW) night Minutes + 2.5p/Sec call Rate; 180 days Validity	Call	F
Plan Voucher	PV 1449	Unlimited Local + STD outgoing + Roaming L/N mobile & landline calls + 1.5 GB 4G/3G/2G data/day + 100 Local/national SMS/day for 180 Days	Call+ Message+ Data	B
STV	STV109	STV109 - Unlimited Local/National Calls + 200 MB 4G/3G/2G Data, 15 Days	Call+ Data	E
STV	STV209	STV209 - Unlimited Local/National Calls + 4 GB 4G Data + 100 SMS/Day, 28 Days	Call+ Message+ Data	B
STV	STV 298	50 GB 2G/3G/4G Data, 28 Day (applicable recharges with PV 128)	Data	G
Combo Voucher	CV 39	Rs. 30TT + 2.5p/Sec Calls +100 MB Data	Call+ Data+ Monetary Value	C
Combo Voucher	CV 79	Talk time of Rs 64 + All calls@ 2.5p/sec + 200 MB Data for 21 Days	Call+ Message+ Data+ Monetary Value	A
Top Up Voucher	Top Up 50	Talk time of Rs.39.37	Monetary Value	H
Prepaid International Roaming	IR 295	Total countries in pack: 24 1. 24 Countries - 40min OG (local + India calling) & Incoming 2. Rest of the World calling at standard roaming rates 3. Post outgoing calling quota, charges @ Rs. 10/min, 4. SMS Rs25/MB, Data will be kept OFF	Call+ Message (During International Roaming)	J

Prepaid International Roaming	IR 695	24 countries: 120 min OG Calls (Local + Call back to India), Free Incoming Calls, 1GB; 4 countries: 50 min OG Calls (Local + Call back to India), Free Incoming Calls, 300MB. Other: Post quota Rs3/min; OG International Calls at standard roaming rates; SMS: Rs25/SMS; Post quota data will be kept OFF	Call+ Message+ Data (During International Roaming)	I
Pre-paid SUK	SUK5	Local/STD calls at 2.5p/sec, Data at 0.05/10 KB for 2G/3G/4G, SMS Local/STD/ISD at Rs 1/1.5/5, Roaming Calls charges (Local Network) Local/STD outgoing at Rs.0.8/min & Rs 1.15/min, Incoming calls-FREE, Roaming SMS charges (Local Network) for Local/STD/ISD at Rs0.25/ 0.38/ 5 . Validity 28 days	Call+ Message+ Data	B

2. Sorting of Tariff Offerings

Product sub-category	Product Name	Groups based on tariff offerings	Group description
Combo Voucher	CV 79	A	Call+ Message+ Data+ Monetary Value
Plan Voucher	PV 1449	B	Call+ Message+ Data
STV	STV209	B	Call+ Message+ Data
Pre-paid SUK	SUK5	B	Call+ Message+ Data
Combo Voucher	CV 39	C	Call+ Data+ Monetary Value
Plan Voucher	PV 154	D	Call+ Message
STV	STV109	E	Call+ Data
Plan Voucher	PV 154	F	Call
STV	STV 298	G	Data
Top Up Voucher	Top Up 50	H	Monetary Value
Prepaid International Roaming	IR 695	I	Call+ Message+ Data (During International Roaming)
Prepaid International Roaming	IR 295	J	Call+ Message (During International Roaming)

3. Sampling of Tariff Offerings and Subscribers

Group	Group description	Total Number of tariff offerings	Product sub-category	Product name	Subscriber base during the quarter	Number of subscribers selected for Audit	Total number of subscribers selected for audit
A	Call+ Message+ Data+ Monetary Value	2	Combo Voucher	CV 95	14820	612	1067
			Combo Voucher	CV 79	11020	455	
B	Call+ Message+ Data	27	STV	STV 269	25000	226	1067
			STV	STV 299	24000	217	
			STV	STV 301	23500	213	
			STV	STV 601	23410	212	
			STV	STV 267	22000	199	
C	Call+ Data+ Monetary Value	3	Combo Voucher	CV 99	20400	459	1067
			Combo Voucher	CV 99	16090	362	
			Combo Voucher	CV 39	10890	246	
D	Call+ Message	1	Plan Voucher	PV 154	9000	1067	1067
E	Call+ Data	1	STV	STV109	13000	1067	1067
F	Call	1	Plan Voucher	PV 154	7000	1067	1067
G	Data	2	STV	STV 418	16500	581	1067
			STV	STV 298	13800	486	
H	Monetary Value	4	Top Up Voucher	Top Up 30	11480	290	1067
			Top Up Voucher	Top Up 30	10950	277	
			Top Up Voucher	Topup 20	10200	258	
			Top Up Voucher	Top Up 50	9600	242	
I	Call+ Message+ Data (During International Roaming)	8	Prepaid International Roaming	IR 695	2000	271	1067
			Prepaid International Roaming	IR 1495	1800	244	

			Prepaid International Roaming	IR 995	1580	214	
			Prepaid International Roaming	IR 2695	1300	176	
			Prepaid International Roaming	IR 5195	1200	162	
J	Call+ Message (During International Roaming)	1	Prepaid International Roaming	IR 295	1010	1010	1010

DRAFT