

**TELECOM REGULATORY AUTHORITY OF INDIA  
NOTIFICATION**

**New Delhi, the 21<sup>st</sup> March, 2006**

**File No. 305-8/ 2004 (QoS)**. In exercise of the powers conferred upon it under section 36 read with paragraphs (i) & (v) of clause (b) and clause (d) of sub-section (1) of section 11 of TRAI Act 1997, the Telecom Regulatory Authority of India hereby makes the following regulation, namely:

**Short title, extent and commencement**

1. (i) This regulation shall be called “*Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006*” (5 of 2006) (hereinafter called the ‘Regulation’).
- (ii) This regulation shall be applicable to all the Basic Service Providers, Unified Access Service Providers and Cellular Mobile Telephone Service Providers, including Mahanagar Telephone Nigam Limited and Bharat Sanchar Nigam Limited.
- (iii) This regulation shall come into effect from the date of its publication in the Official Gazette.

**Definitions**

2. In this Regulation, unless the context otherwise requires:

- (i) ‘**Act**’ means the Telecom Regulatory Authority of India Act, 1997.
  - (ii) ‘**Basic Telecommunication Services**’ means services derived from a Public Switched Telephone Network (PSTN) and as specified in the licence.
  - (iii) ‘**Cellular Mobile Telephone Services**’ means services derived from a Public Land Mobile Network (PLMN) & as specified in the License. This includes both Cellular Mobile Telephone Service provided through GSM and CDMA Technology.
  - (iv) ‘**Quality of Service**’ is the main indicator of the performance of a telephone network and of the degree to which the network conforms to the stipulated norms.
- <sup>1</sup>[(iva) “**Quarter**” means a period of three consecutive months ending on the 30<sup>th</sup> June, the 30<sup>th</sup> September, the 31<sup>st</sup> December and the 31<sup>st</sup> March of the financial year;
- (ivb) “**year**” means the financial year;]

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<sup>1</sup> Ins. by the Amendment Regulations, 2013, reg. 2(a) (w.e.f. 25.03.2013)

(v) Words and expressions used in this Regulation and not defined here shall bear the same meaning as assigned to them in the Act.

### **Purpose of laying down the Code of Practice for Metering and Billing Accuracy:**

3. The purpose of laying down the Code of Practice for metering and billing accuracy is to:

- (i) Bring uniformity and transparency in the procedures being followed by service providers with regard to metering and billing.
- (ii) Prescribe standards relating to accuracy of measurement, reliability of billing.
- (iii) Measure the accuracy of billing provided by the Service Providers from time to time and to compare them with the norms so as to assess the level of performance.
- (iv) Minimize the incidences of billing complaints.
- (v) Protect the interest of consumers of telecommunication services.

### **4. Code of Practice for metering and billing accuracy:**

The service provider is required to comply with the Code of Practice for metering and billing accuracy as laid down in Annexure-1.

### **5. Review:**

The code of practice for metering & billing accuracy as given in regulation 4 above may be reviewed by the Authority from time to time. The Authority, on reference from any affected party, and for good and sufficient reasons, may review and modify this regulation.

<sup>1</sup>**[6. Audit of Metering and Billing System----** (1) The Authority may, from time to time, notify the panel of auditors, who meet the eligibility conditions specified by the Authority in this regard, to audit the metering and billing system of the service providers.

(2) Every service provider shall, by the 30<sup>th</sup> April of every year, appoint an auditor from the panel of auditors notified by the Authority under sub-regulation (1) to audit at its cost, its metering and billing system of Basic Telephone Service (wireline) and Cellular Mobile Telephone Service on annual basis:

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<sup>1</sup> Subs. by the Amendment Regulations, 2013, reg. 3 (w.e.f. 25.03.2013), for the following:

**“6. Auditing of Metering and Billing System:**

The Authority shall notify the panel of auditors to certify the Metering and Billing System of service providers. The service providers shall arrange audit of their Metering and Billing System in compliance with this regulation on an annual basis through any one of the auditors as may be notified by the Authority and an audit certificate thereof shall be furnished to the Authority not later than 30<sup>th</sup> June of every year.”

*Provided* that the Authority may, on receipt of request from the service provider, extend the time for appointment of the auditor and the service provider shall appoint the auditor within such extended time:

*Provided further* that the service provider may appoint an auditor for one or more services:

*Provided also* that the service provider shall not appoint an auditor-

- (a) consecutively for more than two years;
- (b) who is its internal auditor; and
- (c) with whom it has business relationship during the last one year.

*Explanation:* For the purpose of this regulation, audit of the metering and billing system under these regulations shall not be treated as business relationship.

(3) The Authority may, from time to time, issue such guidelines and checklist, as it may deem fit for audit of the metering and billing system of the service provider and every service provider shall arrange audit of their metering and billing system in accordance with such guidelines and checklist.]

**<sup>1</sup>[6A. Procedure for auditing of call data records—** (1) The call data records of one month generated under different tariff plans shall be audited in each Quarter in a manner so as to include—

- (a) three prepaid plans that have the maximum number of customers at the beginning of the Quarter;
- (b) two new prepaid tariff plans launched during the Quarter;
- (c) two Special Tariff Vouchers having maximum number of customers at the beginning of the Quarter;
- (d) two prepaid data plans having maximum number of customers at the beginning of the Quarter;
- (e) two post paid plans having maximum number of customers at the beginning of the Quarter;
- (f) two new post paid tariff plans launched during the Quarter; and
- (g) two new post paid data plans having maximum number of customers at the beginning of the Quarter:

*Provided* that tariff plans shall not include corporate tariff plans, not offered to all the consumers:

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<sup>1</sup> Ins. by the Amendment Regulations, 2013, reg. 4 (w.e.f. 25.03.2013)

*Provided further* that in case the new tariff plans launched during the Quarter is less than the number of tariff plans specified under this regulation for audit, other tariff plans of the service provider having maximum number of customers shall be audited.

(2) Every service provider shall provide to the auditor, within thirty days of receipt of request, the call data records and other documents, as may be required by the auditor, for conduct of audit.

(3) If the auditor notices the instance of overcharging, he shall report the instance of overcharging to the service provider, who shall, within fifteen days of receipt of such report, conduct an analysis to verify whether the observation of the auditor is correct and in case, the observation of the auditor is found to be correct, the amount overcharged from the customers shall be refunded to such customers within two months of the receipt of the report and an intimation to this effect shall be sent to the auditor and in case the observation of the auditor is found to be incorrect, the reasons for the same shall be communicated forthwith to the auditor.

(4) Every service provider shall analyse the audit observations and provide to the auditor, for recording in the audit report, detailed comments thereon including—

- (a) reasons for occurrence of the problem;
- (b) date of occurrence of the problem; and
- (c) date of rectification of the problem.

(5) Every service provider shall submit to the Authority by the 31<sup>st</sup> July of every year in which audit of their metering and billing system is completed, an audit report certified by the auditor separately, for Basic Telephone Service (wireline) and Cellular Mobile Telephone Service, for each service area, in such format as the Authority may specify, from time to time, by an order.

(6) Every service provider shall submit to the Authority by the 15<sup>th</sup> November of every year, an action taken report on each audit observation containing therein the details of the action taken on such observations, in such format, as may be specified by the Authority, from time to time, by an order and such details shall include----

- (a) reasons for occurrence of the problem;
- (b) date of occurrence of the problem;
- (c) date of rectification of the problem;
- (d) action taken to address the problem;
- (e) number of customers affected in respect of cases where overcharging was observed by the auditor and total amount involved;
- (f) number of customers under item (e) to whom refunds were made within the time limit specified under sub-regulation (3) and total amount so refunded;
- (g) number of customers to whom refunds were made beyond the time limit specified under sub-regulation (3) and the total amount so refunded; and
- (h) number of customers to whom refunds could not be made and total amount which could not be refunded.

**6B. Obligations of auditor---** (1) Every auditor shall----

- (a) undertake audit of the metering and billing system of a service provider in accordance with the guidelines and checklist issued by the Authority under these regulations and it shall not undertake audit of a service provider consecutively for more than two years;
- (b) comply with the provisions of the regulations, directions, orders and instructions issued by the Authority, from time to time.

(2) Every auditor shall----

- (a) ensure that the audit is conducted in fair and transparent manner;
- (b) ensure that the confidential data collected during the conduct of audit of a service provider is not shared with any person except in the manner provided under these regulations;
- (c) submit to the Authority report on progress of audit in such format and at such intervals as the Authority may specify from time to time;
- (d) report immediately to the service provider instances of overcharging noted by it during the conduct of audit;
- (e) examine on receipt from the service provider, under regulation 6A, the reasons for non-acceptance of the audit observation on overcharging in excess of the applicable tariff, whether such reasons are acceptable or not and, in case the auditor does not accept reasons furnished by the service provider, he shall report such cases in the audit report along with his observations thereon;
- (f) submit to the Authority, a monthly progress report on action taken by the service provider on instances of overcharging reported under regulation 6A, in such format, as may be specified by the Authority, from time to time;
- (g) verify the action taken by the service provider on instances of overcharging reported under regulation 6A and shall include the findings thereof in the audit report;
- (h) be responsible for completing the audit within the time limit to enable the service provider to submit the audit report to the Authority within the time limit specified under regulation 6A;
- (i) check, while auditing the metering and billing system of a service provider, compliances of the service provider to the Code of Practice for Metering and Billing Accuracy laid down in the regulation and, based on his assessment, he shall prepare an audit report containing ----
  - (i) separate audit report for each licensed service area audited by him;
  - (ii) the methodology adopted for carrying out the audit;
  - (iii) details of tariff plans audited;

- (iv) deficiency noted by him with respect to each of the code or quality parameter laid down in the Code for Practice for Metering and Billing accuracy and his comments on compliance reported by the service provider;
  - (v) certificate that he has received all information and explanation from the service provider necessary for the conduct of audit;
  - (vi) comments on the authenticity of the information received from the service provider for the purpose of the audit;
  - (vii) details of test calls, sample analysis made and the results thereof, separately for each audit observations;
  - (viii) analysis of the complaints lodged in the records of the service provider to identify whether the service provider had undertaken root cause analysis of such complaints; and
  - (ix) verification of action taken on the audit observations in the preceding year; and
- (j) include in the audit report all the comments received from the service provider under regulation 6A against each audit observation.

(3) The Authority may refer complaints relating to billing, value added services and other complaints for verification or investigation by the auditor and every auditor, to whom such complaints have been referred by the Authority, shall verify and investigate such complaints and furnish report thereon to the Authority within such time as the Authority may specify, from time to time.

(4) If an auditor fails to comply with the provisions of these regulations, he shall be liable to be removed from the panel of the auditors:

*Provided that* reasonable opportunity shall be given to the auditor to explain the non-compliance observed by the Authority.

**6C. Consequence for failure of the service providers to submit audit report and action taken report-----** (1) If a service provider contravenes the provisions of sub-regulation (5) and sub-regulation (6) of regulation 6A, it shall, without prejudice to the terms and conditions of its licence, or the provisions of the Act or rules or regulations or orders made, or, directions issued, there under, be liable to pay an amount, by way of financial disincentive, not exceeding rupees one lakh per report for every week or part thereof during which the default continues, as the Authority may, by order, direct:

*Provided that* no order for payment of any amount by way of financial disincentive shall be made by the Authority unless the service provider has been given a reasonable opportunity of representing against the contravention of the regulation observed by the Authority;

(2) The amount payable by way of financial disincentive under these regulations shall be remitted to such head of account as may be specified by the Authority.

**6D. Consequence for failure of the service providers to refund overcharged amounts to customers-----** (1) If a service provider contravenes the provisions of sub-regulation (3) of regulation 6A, it shall, without prejudice to the terms and conditions of its licence, or the provisions of the Act or rules or regulations or orders made, or, directions issued, there under, be liable to pay an amount, by way of financial disincentive, equivalent to the amount overcharged which was not refunded, as the Authority may, by order, direct:

*Provided that* no order for payment of any amount by way of financial disincentive shall be made by the Authority unless the service provider has been given a reasonable opportunity of representing against the contravention of the regulation observed by the Authority:

*Provided further that* no financial disincentive shall be levied under this regulation for failure to refund the excess charges if financial disincentive for such overcharging has been levied for violation of the provisions of the Telecommunication Tariff Order, 1999.

(2) The amount payable by way of financial disincentive under these regulations shall be remitted to such head of account as may be specified by the Authority.

**6E. Consequence for failure to provide comments on audit observations in the Action taken report-----** (1) If a service provider fails to provide details of the action taken on the audit observations under sub- regulation (6) of regulation 6A or it has submitted details of action taken which it knows or believes to be false or does not believe to be true, it shall, without prejudice to the terms and conditions of its licence, or the provisions of the Act or rules or regulations or orders made, or, directions issued, there under, be liable to pay an amount, by way of financial disincentive, not exceeding rupees ten lakhs per action taken report, as the Authority may, by order, direct:

*Provided that* no order for payment of any amount by way of financial disincentive shall be made by the Authority unless the service provider has been given a reasonable opportunity of representing against the contravention of the regulation observed by the Authority;

(2) The amount payable by way of financial disincentive under these regulations shall be remitted to such head of account as may be specified by the Authority.]

## **7. Explanatory Memorandum:**

This regulation contains at Annexure-2, an explanatory memorandum, which explains the background and reasons for its issuance.

## **8. Interpretation:**

In case of any doubt regarding interpretation of any of the provisions of this Regulation, the decision of the Authority shall be final and binding.

**Code of Practice for metering and billing accuracy**

**1. Information relating to Tariffs**

<sup>1</sup>**1.1** Before a customer is enrolled for any telecommunication service, he shall be provided the detailed information relating to the tariff applicable for that service.]

<sup>2</sup>**1.2** The customer shall be provided a copy of the Customer Acquisition Form at the time of the enrollment and shall also be informed in writing, in accordance with the regulations, directions and orders issued by the Authority, not later than one week after the activation of service, about—

- (i) the tariff plan subscribed by him;
- (ii) quantity related charges such as the charge for each SMS message, or kilobyte of data etc.;
- (iii) accuracy of measurement of time, duration and of quantity, and also the resolution and rounding rules, including the underlying units, used when calculating the charges for an individual event or an aggregation of event; and
- (iv) contractual terms and conditions for provision, restriction and termination of service]

**1.3** Where a value-added service (e.g. download of content, such as a film clip or ring tone) or entry to an interactive service (such as a game) can be selected through a choice of the service user (e.g. by dialing a specific number) then the charge for the service must be provided to him before he commits to use the service.

<sup>3</sup>**1.4** The information about the tariff plans, Plan Vouchers, Top Up Vouchers, Special Tariff Vouchers and Combo Vouchers on offer shall be available on the website of the service provider in accordance with the regulations, directions and orders issued by the Authority, from time to time.]

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1 Subs. by the Amendment Regulations, 2013, reg. 5(a) (w.e.f. 25.03.2013), for the following:

“1.1 Before a customer is enrolled as a subscriber of any telecommunication service, he shall be provided in advance with detailed information relating to the tariff for using that service, in accordance with TRAI’s Direction No. 301-26/2003-TRAI(Eco) dated 2<sup>nd</sup> May, 2005 and No. 301-49/2005-Eco dated 16.09.2005. Further, the service provider should inform the customer in writing, within a week of activation of service, the complete details of his tariff plan. Such information shall be in the format “C” prescribed in TRAI Direction No. 301-26/2003-TRAI(Econ.) dated 2<sup>nd</sup> May, 2005. In addition, the following information shall also be provided:

- Quantity related charges (e.g. the charge for each SMS message, or kilobyte of data transmitted).
- Accuracy of measurement of time, duration and of quantity, and also the resolution and rounding rules, including the underlying units, used when calculating the charges for an individual event or an aggregation of events
- Contractual terms and conditions for supply, restriction and cessation of Service”

2 Subs. by the Amendment Regulations, 2013, reg. 5(b) (w.e.f. 25.03.2013), for the following:

“1.2 The information required in clause 1.1 shall be available on the Service Provider’s web site, as prescribed in TRAI Direction No. 301-26//2003-TRAI(Econ.) dated 2<sup>nd</sup> May, 2005.”

3 Ins. by the Amendment Regulations, 2013, reg. 5(c) (w.e.f. 25.03.2013)



## **2. Provision of Service**

The services provided to the customer and all subsequent changes therein shall be those agreed with him in writing prior to providing the service or changing its provisions.

## **3. Accuracy of Measurement**

<sup>1</sup>[3.1 All charges levied for telecommunication services levied on the customer shall be consistent with the tariff applicable to the customer.]

**3.2** Unless otherwise specified in the published Tariff or previously agreed Tariff, a charge shall be determined in accordance with the following limits:

- (a) Where the charge is dependent upon duration, the recorded duration shall be measured to within:
  - (i) Between +1 seconds and –1 second; or
  - (ii) Between +0.01% (1:10,000) to –0.02% (1:5,000) whichever is less stringent; and
- (b) where the charge is dependent upon the time of day, the time of day shall be recorded to within  $\pm 1$  second, traceable to an appropriate time reference; and
- (c) where the charges are dependent upon the counting of occurrences of a particular type, the count shall be accurate to no more than plus 1/25,000 (0.004%) or minus 1/1,000 (0.1%).

**3.3** Where measurement under clauses 3.2 (a), (b) & (c) reveals systematic errors in timing or counting that result in overcharged events which are not stated in published Tariffs then correction should take place to ensure accurate Bills.

## **4. Reliability of Billing**

**4.1** The performance of a Total Metering and Billing System shall be, subject to the tolerances specified in clause 3.2:

- (a) the numbers of items of service usage that are overcharged events or undercharged events, as a proportion of the total number of chargeable events, shall not exceed the limits shown in Table 1; and
- (b) the sum of the values of the errors in the overcharged events or undercharged events, as a proportion of the total value of the total number of Chargeable events, shall not exceed the limits shown in Table 1.

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<sup>1</sup> Subs. by the Amendment Regulations, 2013, reg. 5(d) (w.e.f. 25.03.2013), for the following:

“3.1 All charges must be consistent with the published Tariff applicable to the end-user charged.”

**Table 1 – Total Metering and Billing System reliability performance requirements**

Chargeable events	Performance
Number under or not charged	0.1% (1 in 1000)
Number overcharged	0.004% (1 in 25,000)
Value under or not charged	0.05% (1 in 2000)
Value overcharged	0.002% (1 in 50,000)

**4.2** Where implementation of an order for a service, feature or discount which depends on the number or duration of chargeable events is applied at variance with published Tariffs, each chargeable event within the scope of the incorrectly applied order shall be an undercharged event or an overcharged event, as appropriate, for the purposes of clause 4.1.

**4.3** Where an item of service usage is completed other than intended, but the charge applied is correct for the service as delivered, this shall not be regarded as either an undercharged event or an overcharged event.

**4.4** The increase in duration or number of items of service usage resulting from degraded transmission performance shall not be taken into account when computing the performance of the system.

## **5. Applying Credit to Accounts**

**5.1** For post-pay accounts, payments made by a customer shall be credited to his account within 3 working days of receipt of the cash/ cheque. Where credit is given by the service provider, this shall be applied within one working day of its agreement.

**5.2** For pre-pay accounts, top-up credit shall be applied to a customer's account within 15 minutes of its application. Where credit is given by the service provider, this shall be applied within 1 day of its agreement.

## **6. Timeliness of Post Pay Billing**

**6.1** The timeliness of bill issue or bill data file issue shall be subject to systematic processes.

**6.2** Any chargeable events the details of which are not available when the bill is prepared shall be included in a subsequent bill, but not later than the fourth monthly bill after the chargeable events occurred. Any details not so presented shall be written off and if significant be counted against the performance for undercharged events in clause 4.1. Exceptionally, event details from a separate service provider may be billed up to three months after receipt.

**6.3** Agreement to extend the timescales described in clause 6.2 may be sought from the TRAI. An extension will only be available on an irregular basis. Decisions will be made on application for an extension concerning:

- (a) the method in which how customers will be informed of a protracted delay in rendering call records onto a subsequent bill; and
- (b) the integrity of the billing process audit arrangements.

**6.4** The service provider shall contract with its delivery agent to ensure that an effectual bill or bill data file delivery schedule is in place. The existence of such a contract shall be subject to audit.

## **7. Restriction and Removal of Service**

Where the service provider unilaterally intends to restrict or cease service to the customer, a notice shall be provided to the customer in advance of such action so that the customer has reasonable time to take preventive action to avoid restriction or cessation of service.

## **8. Complaint Handling**

**8.1** The service provider shall have a documented process for identifying, investigating and dealing with billing complaints and creating appropriate records thereof.

**8.2** The service provider shall carry out a root cause analysis for each upheld billing complaint, categorise the cause and establish proportionate remedial action to correct it.

**8.3** Where the root cause affects multiple customer accounts, then all affected Bills shall, if practicable, be included in a recovery programme.

**8.4** Where remedial action has not been completed and the cause is likely to affect other bills when issued, then the service provider shall take reasonable steps to ensure that they are checked and, if necessary, corrected, before being sent to the customer. If not checked and corrected such Bills shall be included in a recovery programme (clause 8.3).

## **9. Materiality**

Compliance with the requirements contained in this regulation shall need to be demonstrated only in relation to products and services that have a material impact on the customer's bill. This materiality is deemed to be:

- (a) where the service provider's turnover from a product or service comprises 5% or more of its total turnover with the customers targeted for that product or service; or
- (b) where the number of customers subscribing to a product or service offered by the service provider comprises 5% or more of the customers targeted for that product or service; or
- (c) at the specific direction of the TRAI.

**10. Submission of Compliance.**

The service providers shall submit the compliance of above code of practice to TRAI on yearly basis.