



TELECOM REGULATORY AUTHORITY OF INDIA

TERMS OF REFERENCE

FOR

Formation of a panel of Auditors to certify the
Metering and Billing System of service providers.

5th May, 2006

**Telecom Regulatory Authority of India
Trikot-I, (2nd Floor), Near Regional Passport Office,
Bhikaji Camaplace, New Delhi – 110 029**

Subject: Formation of a panel of Auditors to certify the metering and billing system of service providers.

1. Background:

1.1 TRAI Act, 1997 mandates the Authority to lay down the Standard for Quality of Service to be provided by service providers and to ensure Quality of Service so as to protect interest of the consumers of Telecom service. Billing related complaints are part of QoS parameters.

1.2 In a competitive market, many new and different charging options are being introduced continuously by the service providers. Some of which may apply only to a single customer or group of customers for either a defined or ongoing period. The results of these complexities many times lead to billing complaints.

1.3 TRAI has received many billing related complaints for their early resolution. Many of the complainants have complained of lapses / flaws in billing programme of the Telecom Operators due to which they are being overcharged.

1.4 In end 2004, TRAI had conducted an audit of the metering and billing system of different mobile operators to help TRAI define the parameters with benchmarks for fair and reliable metering and billing system. As a follow-up to the audit of the billing system of mobile operators, the Authority had developed a draft Code of Practice for metering and billing accuracy, which has benchmarks for metering and billing system, so as to bring standardization and transparency in the procedures being followed by various operators. The Authority had undertaken public consultation on the draft Code of Practice for metering and billing Accuracy along with other issues emerged out of auditing of billing systems of mobile operators. Keeping in view the comments received from stakeholders, TRAI notified the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 (5 of 2006) dated 21.03.06 (Annex.1)

1.5 The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 provides for TRAI to notify a panel of auditors (to be reference as 'Agency' hereinafter) to audit the Metering and Billing System of service providers. The service providers may appoint any one of these Agencies for auditing their billing system vis-à-vis the Code of Practice for metering and billing accuracy. The auditing of the billing system is required to be done on an annual basis. The audit report issued by the Agency shall be filed with TRAI not later than 30th June of every financial year. The charges for such auditing of the billing system shall be borne by the service providers. The service providers shall take corrective action on the inadequacies, if any, pointed out by the Agency in the Certificate and an Action Taken Report thereon shall be filed by with TRAI not later than 30th September of every financial year.

2. **Billing system:**

2.1 A billing system is composed of a series of independent applications that, when run together, are referred to as the billing system. Its major components are as follows:

- Call Data Record (CDR) —This is used to record the details of the call. Usual information on a CDR includes start time of call, end time of call, duration of call, originating number and terminating number.
- Guiding—This matches calls to customer calling plans/direction table. The application uses the start and end number and the duration and time of call to decide what the charge should be, based on the calling plans on the customer's record.
- Rating application--- This program applies the rate for the individual guided calls. Rating gives the call a value to be charged at the time of billing (not including any promotions, discounts or taxes).
- Billing--- This is usually performed once a month. This job collects all the rated calls that have been stored over the past 30 days. The program adds any promotions and discounts that are associated with the consumer account. For example, if customers have called over a certain number of minutes, they might get a volume discount. In addition, taxes and credit are applied.
- Invoicing--- When the billing job is complete, a file is created that includes all of the customer's information. This file is sent to a print house to be converted to paper invoices.

3. **Objective:**

The primary objective of the Scheme is to identify qualified, experienced and capable Auditors who could audit the billing system of basic and cellular mobile service providers and give their observations in the audit report about they meet the defined levels of accuracy vis-à-vis the Code of Practice for metering and billing accuracy and to notify a panel of such Auditors.

4. **Qualifications and experience of Audit Agencies to be considered for empanelment:**

4.1 The Agency should have accreditation from the Quality Council of India/ National Accreditation Board for Certification Bodies or from the International Accreditation Forum or should be an audit firm registered with the Institute of Chartered Accountants of India/ Institute of Costs and Works Accountants of India having experience in technical audit of similar nature to carry out the Metering and Billing approval process as defined in the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006. The Agency should preferably have proven experience in the audit of billing system especially

of telecom service. The Agency should submit documentary evidence regarding their accreditation/ registration.

4.2 The Audit Agency shall be a company or firm registered in India and having presence in India.

4.3 The panel of agencies will be selected by the Authority based on the experience of the Agency in executing work of similar nature, qualifications and experience of the staff to be assigned for the proposed Auditing and certification of metering and billing system of telecom operators and the quantum of similar work executed by the Agency in terms of number of firms and their net worth. The Agency shall submit documentary evidence relating to the above criteria. The decision of the Authority with regard to the selection of the Authority shall be final.

4.4 The Agency could associate providers of revenue assurance services/ solutions in their audit work. However, such providers should not be associated with or should not have provided revenue assurance solution to any of the telecom service providers in India. The details of any tie up with revenue assurance service provider should be submitted along with the proposal.

4.5 The Agency, its director and the staff responsible for carrying out the tasks for which the firm has been appointed must not be a designer, manufacturer, supplier or installer of electronic communications networks or of communications metering and / or billing solutions. An undertaking to this effect should also be submitted along with the proposal.

4.6 The Agency must be independent of Service Providers and avoid direct involvement in the design, construction, operation or maintenance of electronic communications networks or communications metering and / or billing solutions. They shall not represent parties engaged in these activities. These restrictions do not, however, preclude the possibility of exchanges of technical information, including discussion of the means of meeting the requirements, between such organisations and the Agency.

4.7 The Agency must have at its disposal the necessary staff and facilities to enable it to perform properly the administrative and technical work associated with the tasks for which it has been appointed.

4.8 The staff responsible for assessments must have:

- sound professional and technical qualifications;
- a satisfactory knowledge of the evaluations required to be carried out and adequate experience of such assessments; and
- the ability to draw up the certificates, records and reports required to authenticate the performance of the assessments.

4.9 The details of empanelled Agencies will be displayed on TRAI's web-pages.

5. **Scope of work:**

The scope of work of the Audit Agency are as under:

5.1 The Agency shall assess Service Providers' Metering and Billing System and approve compliant Service Providers' Metering and Billing System in accordance with the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006.

5.2 The Audit Agency shall perform the Audit to check compliances of the service provider to the code of practice for metering and billing accuracy laid down in Annexure I of the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006.

Consequent upon the Audit Agency shall prepare an Audit Report in accordance with the following:

- Details of tariff plans audited;
- Separate audit report for each of the licensed service area for which Audit agency has been engaged by the service provider;
- The detailed methodology for carrying out the Audit. The methodology should cover all points stated in para 5.11 of the TORs;
- Comments on compliance, deficiency or an observation (explained in para 5.10) with respect to each of the code/quality parameter laid down in the Code for Practice for metering and billing accuracy;
- Certificate from the Auditor that he has received all information and explanation from the service provider, necessary for the purpose of audit;
- Comments of the Auditor about authenticity of the information received from the service provider for carrying out the Audit.

5.3 The audit Agency and its staff must carry out the tasks for which they have been accredited with the highest degree of professional integrity and technical competence. They must be free from all pressures and inducements, particularly financial, which might influence their judgment or the results of any assessment, especially from persons or groups of persons with an interest in such results.

5.4 The impartiality of inspection staff must be guaranteed. Their remuneration must not depend on the number of assessments carried out or on the results of such assessments. The Agency is similarly expected to ensure the impartiality of any contract staff.

5.5 The staff of the Agency are bound to observe professional secrecy with regard to all information gained in carrying out its tasks, although this does not preclude proportionate information-sharing with TRAI.

5.6 Agencies appointed under the Regulation are expected to recognise each other's approval activities and to co-operate in the approval of Metering and Billing System spanning multiple Service Providers. Inter-operator dependencies may result in one audit finding evidence to suggest Non-Compliance or similar of a Service Provider approved by another Agency. This should be brought to the attention of the latter Agency for investigation and if unresolved, referred to the TRAI for peer review. In particular, where the Metering and Billing System for a particular service involves multiple Service Providers, then it is expected that an Agency already assessing a second party Service Provider's systems will also assess those parts on which other third party Service Providers are dependant.

5.7 Each Service Provider is expected to be responsible for the costs of the Auditing of its billing system by the empanelled Agency.

5.8 The chosen Agency will advise TRAI that they are beginning the auditing process (on a service by service basis) to enable tracking of the implementation of the audit of the Metering and Billing System of service providers.

5.9 A new Agency shall be required to obtain from the service provider details of any other Agency used before and of any unresolved or outstanding matters, which will include category 1, 2 and 3 items.

5.10 Areas of concern identified by an Agency during the assessment of a Service Provider's Metering and Billing System against the Code of Practice for Metering and Billing Accuracy may come to light in the form of:

- A Non-Compliance ~ an instance of failure to comply with an established requirement. The nature of the failure and the requirement in question need to be made explicit in documenting any Non-Compliance.
- A Deficiency ~ an instance of a lack of adequacy in meeting a requirement. An example might be where a Billing system has no facility to detect duplication of records for the same Service Usage. This would be likely to lead to a breach of Code of Practice for Metering and Billing Accuracy, but the absence of a detection facility only causes a problem when such duplication occurs.

- An Observation ~ a comment about something that has been seen during an assessment, but is not considered sufficiently serious to be a Deficiency. However, it may possibly lead to corrective and / or preventative action.

These will result in matters being raised, which will be categorised in three categories as described below.

Category 1:

- An important matter preventing the issue or continuance of Approval 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 will resolve it as a matter of the utmost importance.
- In any event a detailed corrective action plan must be agreed within one month and put into effect immediately.
- All Category 1 matters for an existing Approval are to be reported by the Agency to TRAI.

Category 2:

- A matter of concern, which is a condition of Approval and which is to be resolved within a period, agreed with the Agency but not exceeding 12-months.
- In any event a detailed corrective action plan must be agreed and put into effect within three-months.

Category 3:

- 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.

5.11 The auditing agency shall: -

-Undertake the verifications of billing and charging of telecom operators both for prepaid and postpaid customers in accordance with the Code of Practice for Metering and Billing Accuracy in a representative manner within the overall sample size.

-Specifically, the auditing Agency shall evaluate inter alia the correctness of the following: -

- In generation process of the CDR-raw CDRs.
- Of the entries in the direction table which is used for rating the raw CDRs.
- Of the rated CDR vis-à-vis the rated applied, duration mentioned, origination and destination codes.

- In charging of VAS services to the subscribers.
- In charging of the roaming services to the mobile subscribers.

-The tariff plans having subscribers more than 10 % of the total subscribers will be audited so that maximum 10 plans of each licensed service area could be verified. The number of sample size to be checked in each plan verification should be such so as to achieve a confidence level of 95% at a confidence interval of 3%.

-The Audit Agency will take the raw CDRs & process the same to generate the Bill and then verify with already generated bill for any discrepancy. The CDRs of last three months are to be processed.

- The Audit Agency will analyse the discrepancy if detected, and find out the root cause of the same.

5.12 Discrepancy Analysis

The discrepancy analysis is done by execution of the inference engine that performs analysis of the rated CDRs in order to establish causes of the discrepancy based on CDR, subscriber and pricing plan data.

5.13 Bill level discrepancy analysis.

After several cycles of event level discrepancy analysis and database adjustment, when all the event level discrepancies are taken care of, the next step is of bill level discrepancy. The bill level discrepancy reports will be produced & analysed by the audit Agency.

5.14 Verification of corrective actions.

In this important stage, a verification of successful implementation of the corrective action is performed

6. **Formation & Validity of the Panel:**

The decision of the Authority to include or not a particular agency in the panel of the audit will be final. The panel shall normally remain valid for a period of two years which may be extended by the Authority.

- The Authority reserves the right to remove any Auditor from the empanelment in case it is found that any of the conditions laid down in the TORs had been contravened.

7. Reporting Requirements:

The audit Agency will be reporting to Secretary, TRAI.

8. Confidentiality

The Audit Agency shall treat all the information provided by the Service Provider as confidential and shall not share this information without the written approval of the Service Providers .

TELECOM REGULATORY AUTHORITY OF INDIA

NOTIFICATION

New Delhi, the 21st 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.
- 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.

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 30th June of every year.

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.

(Sudhir Gupta)
Advisor (QOS)

Code of Practice for metering and billing accuracy

1. Information relating to Tariffs

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 2nd 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 2nd 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

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 2nd May, 2005.

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.

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

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

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 ± 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.

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.

EXPLANATORY MEMORANDUM

Background

1. TRAI has been regularly receiving many billing related complaints, particularly from the mobile customers. For building the confidence of the subscribers in the Billing and Call Charging systems of Telecom Operators, an international consultant had been engaged to help carry out an audit of the metering and billing system of different service providers. The objective of the exercise was to help TRAI define the parameters with benchmarks for fair and reliable metering and billing system. The auditing of the billing systems of mobile operators revealed that while the billing systems being used by various operators are comparable to other systems being deployed by major international players, some of the process/ procedure being followed by the mobile operators leads to customer complaints and the attendant customer dissatisfaction.

2. As a follow-up to the audit of the billing system of mobile operators, the Authority had developed a draft Code of Practice for metering and billing accuracy, which has benchmarks for metering and billing system, so as to bring standardization and transparency in the procedures being followed by various operators. The Authority had undertaken public consultation on the draft Code of Practice for metering and billing Accuracy along with other issues emerged out of auditing of billing systems of mobile operators such as charging for undelivered SMS and short duration calls by releasing a Consultation Paper on these issues on 2nd May, 2005. This paper discusses these benchmarks, Code of Practice for metering and billing accuracy, the international practices and regime for regulating the Code of Practice. Open House Discussions with the stakeholders were held at Hyderabad, Kolkata, Mumbai and Delhi in September/October, 2005. The Authority considered the comments received from stakeholders while finalizing the Regulation.

Code of Practice for metering and billing accuracy:

3. The service providers, though broadly in agreement with the benchmarking and Code of Practice, were not in favour of a separate benchmarking other than those given in the QOS Regulation. The parameter given in the QOS Regulation is complaints-based measure of billing accuracy. While analysis of upheld billing complaints to find root causes is useful in preventing further occurrences of a problem, and is to be encouraged, it is a proactive process. System assessment and performance measurement, if done frequently, has the advantage, of identifying problems and rectifying them before the subscriber becomes aware of them. This reduces the incidence of complaints, benefiting the operator through the reduction of costs of complaint

handling, and reducing the burden of complaints referred to the regulator. As such, the Authority felt that it would be appropriate to implement a Code of Practice for metering and billing accuracy.

4. Information relating to Tariffs

4.1. During the consultation process on Billing Issues TRAI had issued the following directions/ order relating to tariff:

i). Presenting, marketing or offering tariff plan in any misleading manner is not permitted. All monthly fixed recurring charges which are compulsory for the subscriber under any given plan shall be conveyed as a single figure under one head (TRAI's Direction dated 16.09.2005).

ii). The Service Providers must inform the customer in writing, within a week of activation of service, the complete details of his tariff plan. In addition, as and when there are any changes in any aspect/item of tariff in the chosen package, the operator shall intimate, in writing, such changes to those subscribers whose tariff packages undergo a change (TRAI's direction dated 29.06.2005 on information to customers about complete details of the tariff plan)

iii). The Service Providers must publish in all communications/ advertisements relating to premium rate services, e.g. ring tones, wall paper, astrology, quiz etc. the pulse rate/ tariff for the service (TRAI's direction dated 03.05.2005 on Premium Rate Services).

iv). Websites of the service providers shall contain comparison of tariff plans in terms of estimated monthly bill. i.e. financial implications based on certain preset assumptions along with the complete details (TRAI's Direction dated 02.05.2005).

4.2. These directions/order are also incorporated in the Code of Practice. The information regarding rounding rules, accuracy of measurement of time 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 could be given to a customer in writing at the time of his enrolment or immediately thereafter, but within a week of activation of service. In the case of a pre-paid customer this information could be given along with the SIM Card.

4.3. Presently the service providers are offering a range of value added services, many of which are premium rate services like tele-voting, tele-quiz, games, contests etc. In order that the customer is aware of the different rates for these premium rate services it has been provided in the Code of Practice that the customer should be provided information about the charges for the premium rate service every time before he commits to use the service. The service providers

should implement necessary changes in their IVR system for enabling automatic provision of information about premium rate services.

4.4. Regarding Provision of Service at item 4.1(ii), the service providers had represented that SMS may be allowed as a medium for obtaining the consent of the customer for any service. The Authority has accepted this suggestion and SMS could be used as a medium for obtaining the consent of the customer for any service. Such consent through SMS should be explicit and there shall be no deemed consent i.e. consent through default, if no message is received by the service provider.

5. The Authority shall identify a panel of Agencies capable for auditing the billing system. These Agencies are expected to be notified by 30th April, 2006. The service providers may appoint any one of these Agencies for auditing their billing system vis-à-vis the Code of Practice for metering and billing accuracy. The certification of the billing system should be done on an annual basis. The Certificate issued by the Agency shall be filed with TRAI not later than 30th June of every financial year. The charges for such certification of the billing system shall be borne by the service providers. The service providers shall take corrective action on the inadequacies, if any, pointed out by the Agency in the Certificate and an Action Taken Report thereon shall be filed by with TRAI not later than 30th September of every financial year.

6. Before finalisation of this regulation, this regulation in its draft form was sent to all the service providers and consumer organizations for their comments.