

To: **HKSA members**
All other interested parties



EXPOSURE DRAFT

Practice Note 871

“Engagement to report on compliance with the Billing and Metering Integrity Scheme of OFTA”

Comments to be received by 15 March 2003

*Issued by the Council,
Hong Kong Society of Accountants*

The Hong Kong Society of Accountants' Council (Council) has issued an exposure draft of proposed Practice Note “Engagement to report on compliance with the Billing and Metering Integrity Scheme of OFTA” for consultation.

A copy of the exposure draft is attached. The exposure draft can also be found on-line at: < <http://www.hksa.org.hk/professionaltechnical/assurance/exposedraft/ed-pn871.pdf> >.

The Council welcomes comments on all aspects of the exposure draft. Comments are most helpful if they indicate the specific paragraph or group of paragraphs to which they relate, and if they clearly explain the concern or issue and provide a suggestion for alternative wording, if considered necessary, with supporting reasoning.

Comments are requested to be received by **15 March 2003** and may be sent by mail, fax or e-mail to:

Deputy Director, Assurance
Hong Kong Society of Accountants
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Hong Kong

Fax number: 2865 6776
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Comments will be acknowledged and may be made available for public review unless otherwise requested by the contributor.

(January 2003)

PRACTICE NOTE

871

**ENGAGEMENT TO REPORT ON
COMPLIANCE WITH THE BILLING AND
METERING INTEGRITY SCHEME OF OFTA**

(Issued [] 2003)

The purpose of Practice Notes issued by the Hong Kong Society of Accountants is to assist auditors in applying Statements of Auditing Standards (SASs) and Standards on Assurance Engagements (SAEs) of general application to particular circumstances and industries.

They are persuasive rather than prescriptive. However they are indicative of good practice and have similar status to the explanatory material in SASs and SAEs, even though they may be developed without the full process of consultation and exposure used for SASs and SAEs. Auditors should be prepared to explain departures when called upon to do so.

Introduction

Purpose of Practice Note

1. The purpose of this Practice Note is to provide guidance to Certified Public Accountants (“CPA”) on the scope, conduct and reporting requirements of an examination of the compliance of licensed public telecommunications operators (“operators”) with the Billing and Metering Integrity Scheme (“BMIS”) of the Office of Telecommunications Authority (“OFTA”) of the Hong Kong SAR Government. It is stated in the OFTA Document “Requirements on the Assurance, Reporting and Monitoring Procedures for the Billing and Metering Integrity Scheme” (“HKTA 3105”) that the Telecommunications Authority requires operators to engage CPA at least once a year to conduct an examination of operators’ compliance with the procedures set out in the OFTA Document “Quality Assurance Manual for Billing and Metering Integrity Scheme” (“HKTA 3104” or so-called “QAM”) and their Detailed Operation Manual (“DOM”) in the preparation of the Monthly Test Results and Self-Declaration Forms on their billing and metering systems.
2. This Practice Note has been prepared in consultation with OFTA, and it has been agreed that the scope of work and reporting by CPA under this Practice Note would meet the requirements of an examination by CPA under HKTA 3105.
3. This Practice Note is based on the provisions of the QAM (Issue 1) and HKTA 3105 (Issue 1) that were published in June 2002.
4. Every care has been taken in the preparation of this Practice Note. However, this Practice Note should be used in conjunction with the QAM and HKTA 3105.

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5. Except as otherwise specified, the terms in this Practice Note common to the QAM and HKTA 3105 carry the same meaning as those defined in the QAM and HKTA 3105. Reference would need to be made to the QAM and HKTA 3105, where necessary.

Overview of the regulatory framework

6. In June 2002, OFTA issued a document “Code of Practice Related to the Implementation and Compliance of Billing and Metering Integrity Scheme” setting out the guiding principles and requirements for operators, which are operating public telecommunications services based on time or usage charge basis, to follow in the implementation and compliance of the BMIS.
7. The main objective of the BMIS is to enhance billing and metering integrity standards. The QAM sets out the metering and billing integrity standards and the self-appraisal requirements and procedures to be followed and complied with by operators. HKTA 3105 includes general requirements and procedures relating to assurance, reporting and monitoring for the BMIS.
8. The BMIS will be implemented in a phased approach. The first phase of the BMIS will cover post-paid and pre-paid local, international and mobile services offered to customers through the public switched telephone network (“PSTN”), which are based on usage or time charge. This phase of the BMIS will also cover local and international voice and data services related to dial up Internet access services. In the second phase, other types of time or usage charge services such as various data-related services: ISDN, mobile data services etc. will be considered to be included in the BMIS. In the third phase, attention will be paid to consider addressing any new data, multimedia or broadband services which may emerge in the market.
9. Operators which operate services covered by the first phase of the BMIS are required to comply with the BMIS starting from 1 January 2003 onwards.
10. OFTA may take necessary actions in accordance with the terms and conditions of the licence concerned and/or the provisions under the Telecommunications Ordinance (Cap.106) on operators which fail to comply with the BMIS and may ask them to take remedial actions and improvement work.

Responsibilities of operators

11. Operators are responsible for developing the DOM with reference to section 8 of the QAM and for complying with the BMIS as a whole.
12. Operators are also responsible for the preparation of the information and documentation in support of their compliance with the procedures set out in the QAM and the DOM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms. All such information and documentation should be provided to CPA for the purpose of the examination.

Responsibilities of CPA

13. CPA would conduct the examinations in accordance with Standards on Assurance Engagements (SAEs) and with reference to this Practice Note.
14. Examinations are to be conducted by CPA at least once a year. Upon completion of each examination, CPA would produce a compliance report addressed to the operator. This compliance report would be sent by the operator to OFTA by 30 April in the year subsequent to the examination period. Examination period is a calendar year (i.e. from 1 January to 31 December) for existing operators. In the case of new operators, the examination period is from the date of service launch to 31 December. In the case of operators re-entering the BMIS, the examination period is from the designated re-entry date to 31 December.
15. In accordance with the ethical requirements of the Hong Kong Society of Accountants, CPA would need to be, and be seen to be, free in the examinations they undertake of any interest which might detract from objectivity. CPA would do or say nothing that would lead the management of the operators, third parties or the public to place a mistaken degree of reliance on the examination.
16. A significant part of the examination is of a technical nature, and CPA would ensure that they possess or have available the technical expertise in information technology and other areas needed to conduct the examination. CPA would therefore not undertake or continue professional work which they are not competent to perform unless they obtain such advice and assistance as will enable them to carry out the task competently.

Objective and scope of the engagement

17. The objective of the examination is to draw conclusions as to whether the operator has complied with, in all material respects, firstly, the procedures set out in the QAM, and secondly, the procedures set out in the DOM¹, in respect of the preparation of the Monthly Test Results and Self-Declaration Forms for the examination period.
18. The scope of work to be performed by CPA is two fold:
 - a. to examine the information and documentation provided by the operator, which include the DOM, the Monthly Test Results and the Self-Declaration Forms, to ensure that the operator complies with the procedures set out in the QAM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms for the examination period; and

¹ Certain procedures in the QAM will be satisfied through the operator's compliance with procedures described in the DOM.

- b. to examine the information and documentation provided by the operator, which include the Monthly Test Results and the Self-Declaration Forms, in support of its compliance with the procedures set out in the DOM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms for the examination period.
19. Appendix 3 highlights the sections and indicative procedures of the QAM that CPA would refer to when performing the examination.

CPA would not provide any assurance on the design or operational effectiveness of the procedures set out in the DOM in respect of the operator's preparation of the Monthly Test Results and Self-Declaration Forms.

20. Where any or all part(s) of the operator's metering and/or billing operations have been outsourced to one or more external entities regardless whether these entities are operators or not, CPA would note that these outsourced part(s) are subject to examination under the BMIS as if they are operated by the operator itself. The detailed arrangements of the outsourced part(s) and the operations handled by the external entities should be given in the operator's DOM for examination.

CPA would also note that outbound roaming calls, including both mobile and ISP roaming services, that are made by outbound roamers overseas are metered and the bills are calculated by overseas operators and as such, are not subject to examination under the BMIS. If the rough data are metered by overseas operators but the bills are calculated by the operator itself, CPA would then note that this billing part is subject to examination (section 7.2.9 of the QAM).

The issue of inbound roaming calls is not covered in the first phase of the BMIS as for inbound roaming, the local mobile network operators provide the billing information to overseas operators for charging the overseas customers.

21. For the avoidance of doubt, preparation of the Rounding Treatment Test Reports by the operator as required in section 6.3 of the QAM is not to be covered in the examination.

Planning considerations

22. CPA would plan and perform the examination with an attitude of professional scepticism recognizing that circumstances may exist which may cause material exceptions in the operator's compliance with the procedures set out in the QAM and/or the DOM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms for the examination period.
23. In planning the examination, CPA would also consider the application of relevant technical skills and knowledge when examining areas such as the following:

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- a. technical setup of the system / equipment to meet the requirements of the metering model and standards; and
- b. technical setup of the system / equipment to meet the requirements of the billing model and standards.

Given the technical nature of the subject matter, CPA may involve appropriate experts in carrying out the examination.

When using the work performed by an expert, the CPA should consider the requirements of SAS 520 “Using the work of an expert”. The CPA should ensure that the work performed by the expert provides sufficient appropriate evidence to support their conclusions.

24. For operators which hold more than one type of licence which are required to comply with the BMIS, CPA would need to prepare one compliance report for each type of licence. However, this does not apply to mobile network operators which hold more than one licence for the operation of second generation mobile services (i.e., GSM 900/1800, TDMA and CDMA technology).

Conduct of the engagement

25. CPA would exercise professional judgement to design and carry out appropriate procedures to assess and conclude on, for the examination period:
 - a. the operator’s compliance with the procedures set out in the QAM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms; and
 - b. the operator’s compliance with the procedures set out in the DOM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms.

Such procedures would normally include:

- a. discussion with management and relevant personnel of the operator; and
 - b. review of the information and documentation provided by the operator, which include the DOM, the Monthly Test Results and the Self-Declaration Forms, to establish whether the operator complies with the procedures set out in the QAM and the DOM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms for the examination period.
26. As specifically provided for in the QAM, CPA would exercise professional judgement to determine whether to perform physical observation of performance of relevant procedures by staff of the operator in the preparation of the Monthly Test Results and Self-Declaration Forms during the examination period. However, in view of the scope and nature of the engagement, it is strongly advised that physical observation be performed by CPA, and any decision by CPA not to perform this particular procedure should be adequately justified and such justification be properly documented.

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27. It should be noted that, CPA are not required to perform work to test the integrity of the underlying metering and billing systems of the operator or to perform system walkthrough tests to check the operator's actual performance of the procedures in the DOM, and are not required to make use of computer-assisted audit techniques to generate testing results, as they are outside the scope of the engagement.
28. Regarding the Billing Test performed by the operator, CPA would note that the population of bills where the monthly test samples have been drawn should include all bills dispatched to the operator's customers, regardless of whether the bills were prepared manually or automatically by system(s) or whether the bills have been amended prior to being dispatched.
29. Where the rate instead of the value of a service that appears on a bill is set by an external entity, for example, the Public Non-exclusive Telecommunications Service ("PNETS") charge rate being levied by a Fixed Telecommunications Network Services ("FTNS") operator that appears on a bill of an Internet service provider, CPA would note that the Billing Test is subject to examination as if the rate is set by the operator itself.
30. Where CPA become aware, during the examination, of any knowledge or information of non-compliance by the operator with any sections of the QAM and/or the DOM, CPA would have to consider the implications thereof on the scope of their examination and would perform additional procedures, as considered appropriate.
31. CPA would also consider whether exceptions identified in previous periods, if any, re-occurred during the period being reported on.

Engagement letter

32. The basic principles in drafting engagement letters as set out in SAS 140 "Engagement letters" are applicable to this examination. CPA would need to agree the terms of the examination with the operator. The agreed terms would need to be recorded in an engagement letter or other suitable form such as a contract. An example of an engagement letter is included in Appendix 1.
33. Specific matters in relation to the examination that would be included in the engagement letter include:
 - a. the objective of the examination;
 - b. the examination will be performed in accordance with SAEs and with reference to this Practice Note;
 - c. the responsibilities of the operator;
 - d. scope of the examination;
 - e. reporting requirements;
 - f. a reference to the need for management representations;

- g. an explanation of the inherent limitations of the work, including the fact that the examination cannot be relied upon to disclose all material exceptions including fraud, errors and instances of non-compliance which may exist;
- h. any agreed upon limitation of the liability of CPA; and
- i. fees.

Management representations

- 34. CPA are recommended to obtain written confirmation of representations made by the management of the operator in the course of the examination, on matters material to the examination when those representations are necessary to obtaining sufficient appropriate evidence.
- 35. Written management representations which may be sought by CPA include:
 - a. a statement that the management has provided CPA with all the information and documentation in support of the operator's compliance with the procedures set out in the QAM and the DOM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms;
 - b. a statement that the management has disclosed to CPA all significant changes in procedures relating to the preparation of the Monthly Test Results and Self-Declaration Forms;
 - c. a statement that the management has informed CPA of all instances, of which it is aware, when procedures relating to the preparation of the Monthly Test Results and Self-Declaration Forms had not operated as designed; and
 - d. a statement that the management has disclosed to CPA details of any fraud or illegal acts, irregularities or uncorrected errors relating to the preparation of the Monthly Test Results and Self-Declaration Forms attributable to the operator's directors, its officers, employees or agents that came to its attention.

Reporting

- 36. CPA would prepare a compliance report addressed to the operator on the results and findings of the examination. CPA would state clearly in the report their findings during the examination including sufficient details of material exceptions, such as instances of non-compliance with the procedures set out in the QAM and/or the DOM in respect of the operator's preparation of the Monthly Test Results and Self-Declaration Forms for the examination period.
- 37. The form and content of the compliance report by CPA will depend on the specific terms and conditions agreed with the operator. However, such compliance report would normally be expected to contain:
 - a. an introductory paragraph stating the objective of the examination and the period covered by the compliance report;

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- b. the respective responsibilities of the operator and CPA;
 - c. the basis of conclusion in respect of the examination;
 - d. a statement that the examination may not identify all material exceptions and should not be relied upon to disclose all such material exceptions including fraud, errors and instances of non-compliance which may exist;
 - e. the conclusions reached for the examination as to whether in the opinion of the CPA, the operator has complied with, in all material respects, firstly, the procedures set out in the QAM and secondly, the procedures set out in the DOM, in respect of the preparation of the Monthly Test Results and Self-Declaration Forms for the examination period; and
 - f. a statement that the report is intended solely for filing by the operator with OFTA in accordance with HKTA 3105 and for no other purpose.
38. An example compliance report is set out in Appendix 2.

Material exceptions

39. CPA would exercise professional judgement to assess the severity of any noted exceptions and/or deficiencies, based on the results of the work performed in each of the areas under examination. Regardless of whether the operator has reported such exceptions to OFTA during the examination period, CPA would present all instances of non-compliance by the operator with the QAM and/or the DOM in respect of the preparation of the Monthly Test Results and Self-Declaration Forms for the examination period in their compliance report. Where possible, CPA would describe the implications of the instances of non-compliance in their compliance report and would also seek for possible quantification of any potential misstatement of the Monthly Test Results as a result of instances of non-compliance by the operator. An example of the latter would be the misapplication of the switching rules consequential to the identified misstatement of the Monthly Test Results.
40. Where CPA have identified deficiencies in the DOM, other than those in relation to compliance with the QAM, CPA would, at their own discretion, present such deficiencies to the operator in a management letter or separate report.

Appendix 1 – Example engagement letter

The following letter is for use as a guide in conjunction with the considerations outlined in paragraphs [32] and [33] of this Practice Note and will need to be varied according to individual requirements and circumstances. The example wording in respect of a general limitation of liability under the “Limitation of liability” section of the example engagement letter is for general guidance only and does not constitute legal advice. If you are in any doubt as to understanding the statutory requirements and legal implications of the Control of Exemption Clauses Ordinance, you should seek legal advice.

[The Board of Directors]
[Name of the operator]
[Address of the operator]

[Date]
Our ref:

Dear Sirs

Reporting on compliance with the Billing and Metering Integrity Scheme of OFTA [for the period xx/xx/xxxx to xx/xx/xxxx]

This letter is to confirm our understanding of the terms and objective of our engagement to perform an examination of the information and documentation in support of [name of the operator]’s compliance with the procedures set out in the OFTA Document “Quality Assurance Manual for Billing and Metering Integrity Scheme” (“QAM”) and the Detailed Operation Manual of [name of the operator] (“DOM”) in respect of its preparation of the Monthly Test Results and Self-Declaration Forms, and the nature and limitations of such an examination.

Objective of the examination

- 1.1 The objective of the examination is to enable us to draw conclusions, pursuant to the requirements of the OFTA Document, HKTA 3105 “Requirements on the Assurance, Reporting and Monitoring Procedures for the Billing and Metering Integrity Scheme”, as to whether [name of the operator] has complied with, in all material respects, firstly, the procedures set out in the QAM and secondly, the procedures set out in the DOM, in respect of its preparation of the Monthly Test Results and Self-Declaration Forms [for the period xx/xx/xxxx to xx/xx/xxxx].

Use of the compliance report by [name of the operator]

- 2.1 We shall issue a compliance report which is intended solely for [name of the operator] to file with OFTA in accordance with section 4 of HKTA 3105. The compliance report may not be provided by [name of the operator] to third parties for any other purpose without our prior written consent.

Responsibilities of management

- 3.1 As management of [name of the operator], you are responsible for ensuring that [name of the operator] has complied with the procedures set out in the QAM and the DOM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms.
- 3.2 For the purpose of our examination, you should made available to us, as and when required, all relevant records and related information of [name of the operator] that may be needed to support our conclusions on whether [name of the operator] has complied with, firstly, the procedures set out in the QAM and secondly, the procedures set out in the DOM, in respect of its preparation of the Monthly Test Results and Self-Declaration Forms.

Scope of the examination

- 4.1 Our examination will be conducted in accordance with Standards on Assurance Engagements and with reference to Practice Note [871] “Engagement to report on compliance with the Billing and Metering Integrity Scheme of OFTA” issued by the Hong Kong Society of Accountants.
- 4.2 The examination will comprise an examination of the information and documentation provided to us by [name of the operator] in support of its compliance with the procedures set out in the QAM and the DOM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms [for the period xx/xx/xxxx to xx/xx/xxxx].
- 4.3 We shall carry out procedures designed to obtain such appropriate evidence as we consider sufficient to enable us to draw reasonable conclusions therefrom. The nature and extent of our procedures may vary according to our examination of the DOM and may cover any aspects of the business operations that we consider appropriate.
- 4.4 In order to assist us with the examination, we shall request sight of records, documents or statements of [name of the operator], including any correspondence with OFTA relating to the areas covered in our examination.

Reporting requirements

- 5.1 We shall provide a compliance report to you on the results and findings of the examination.
- 5.2 We shall report to you whether in our opinion, [name of the operator] has complied with, in all material respects, firstly, the procedures set out in the QAM and secondly, the procedures set out in the DOM, in respect of its preparation of the Monthly Test Results and Self-Declaration Forms [for the period xx/xx/xxxx to xx/xx/xxxx].

Management representations

- 6.1 As part of our examination procedures, we may request you to provide written confirmation of certain oral representations which we may receive from you and your staff during the course of the examination of matters having a material effect on our compliance report. In connection with representations and the supply of information to us generally, you are responsible for the accuracy and completeness of any information or documentation provided to us.

Limitation of work

- 7.1 Although we shall plan our examination so that we shall have a reasonable expectation of detecting material exceptions such as instances of non-compliance with the procedures set out in the QAM and/or the DOM in respect of [name of the operator]'s preparation of the Monthly Test Results and Self-Declaration Forms, our examination should not be relied upon to disclose all such material exceptions including fraud, errors and instances of non-compliance which may exist.
- 7.2 The purpose of this engagement is to conduct an examination of the information and documentation provided to us by [name of the operator] in support of its compliance with the procedures set out in the QAM and the DOM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms. Accordingly, we will not provide any assurance on the design or operational effectiveness of the procedures set out in the DOM in respect of [name of the operator]'s preparation of the Monthly Test Results and Self-Declaration Forms.

Limitation of liability

- 8.1 We will not be liable for any loss or damage caused by, or arising from, any fraudulent acts, misrepresentation or wilful default on the part of [name of the operator], its directors, employees or agents.
- 8.2 *CPAs would set out any general limitation of liability [Insert CPA's guidance]. For example:*

Any liability of the Firm, its [Partners] [Directors] and staff from actions found against us to pay damages for losses arising as a direct result of breach of contract or negligence on our part in respect of services provided in connection with or arising out of the engagement set out in this letter (or any variation of addition thereof), whether in contract, negligence or otherwise, shall in no circumstances exceed \$[] in aggregate: such amount including all legal and other costs which we may incur in defending any actions against us. The foregoing shall not exclude or restrict liability (if it would otherwise but for the foregoing have arisen) for death or personal injury caused by the negligence (as defined in section 2 of the Control of Exemption Clauses Ordinance) of the Firm, its [Partners][Directors] or staff.

Fees

- 9.1 Our fees will be based on the degree of skill involved, the experience of staff engaged and the time necessarily occupied in the work, plus out-of-pocket expenses.

Agreement of terms

- 10.1 We should be grateful if you could confirm in writing your agreement to these terms by signing and returning the enclosed copy of this letter, or inform us if they are not in accordance with your understanding of the terms of engagement.

Yours faithfully,
ABC & Co.

We agree to the terms of this letter.

.....
[Director, for and on behalf of the board of [name of the operator]]
[Date]

Appendix 2 – Example compliance report

REPORT ON COMPLIANCE WITH THE BILLING AND METERING INTEGRITY SCHEME TO THE BOARD OF DIRECTORS OF [NAME OF THE OPERATOR]

Pursuant to the OFTA Document, HKTA 3105 “Requirements on the Assurance, Reporting and Monitoring Procedures for the Billing and Metering Integrity Scheme”, you have engaged us to conduct an examination of the information and documentation in support of [name of the operator]’s compliance with the procedures set out in the OFTA Document “Quality Assurance Manual for Billing and Metering Integrity Scheme” (“QAM”) and the Detailed Operation Manual of [name of the operator] (“DOM”) in respect of its preparation of the Monthly Test Results and Self-Declaration Forms [for the period xx/xx/xxxx to xx/xx/xxxx].

Respective responsibilities of management and us

You are responsible for ensuring that [name of the operator] has complied with the procedures set out in the QAM and the DOM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms.

It is our responsibility, based on the information and documentation provided to us by [name of the operator], to report on whether [name of the operator] has complied with, in all material respects, the above requirements based on the results of the procedures performed by us.

Basis of conclusion

We conducted our engagement in accordance with Standards on Assurance Engagements and with reference to Practice Note [871] “Engagement to report on compliance with the Billing and Metering Integrity Scheme of OFTA” issued by the Hong Kong Society of Accountants. The engagement comprises an examination of the information and documentation provided to us by [name of the operator] in support of its compliance with the procedures set out in the QAM and the DOM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms [for the period xx/xx/xxxx to xx/xx/xxxx].

Inherent limitations

Although we planned our examination so that we would have a reasonable expectation of detecting material exceptions such as instances of non-compliance with the procedures set out in the QAM and/or the DOM in respect of [name of the operator]’s preparation of the Monthly Test Results and Self-Declaration Forms, our examination should not be relied upon to disclose all such material exceptions including fraud, errors and instances of non-compliance which may exist.

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The purpose of this engagement is to conduct an examination of the information and documentation in support of [name of the operator]'s compliance with the procedures set out in the QAM and the DOM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms. Accordingly, we do not provide any assurance on the design or operational effectiveness of the procedures set out in the DOM in respect of [name of the operator]'s preparation of the Monthly Test Results and Self-Declaration Forms.

Conclusion

Based on the foregoing, in our opinion, [for the period xx/xx/xxxx to xx/xx/xxxx]:

- (i) [except for the exceptions noted below], [name of the operator] has complied with, in all material respects, the procedures set out in the QAM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms; and
- (ii) [except for the exceptions noted below], [name of the operator] has complied with, in all material respects, the procedures set out in the DOM in respect of its preparation of the Monthly Test Results and Self-Declaration Forms.

Use of this report

This report is intended solely for [name of the operator] to file with OFTA in accordance with section 4 of HKTA 3105. This report may not be provided by [name of the operator] to third parties for any other purpose without our prior written consent.

ABC & Co.
Certified Public Accountants
Hong Kong
Date

Appendix 3 – Requirements of the QAM

This appendix highlights the sections and indicative procedures of the QAM that CPA would refer to when reporting on compliance with the Billing and Metering Integrity Scheme. It should be noted that the indicative procedures below are not an exhaustive list and the CPA should refer to the QAM for further details.

QAM Sections	Descriptions	QAM sub-section	Indicative Procedures														
4	Billing and Metering Integrity Standards	4	<p>Metering Integrity Standard</p> <p>Number of inaccurately metered calls shall not exceed 1 in 10,000 of total calls</p> <p>Billing Integrity Standard</p> <p>Absolute summation error value of the inaccurately billed calls in a bill shall not exceed 1 in 10,000 of the value of total billed sum in that bill.</p>														
5.1	Telecommunications Metering Acceptance Model	5.1.2	Operators shall start from the normal inspection. Normal, tightened or reduced inspection shall continue to be unchanged on successive monthly Metering Tests, except where the Switching Rules require changes. The Switching Rules shall be applied to each class of non-conformities or nonconforming units independently.														
		5.1.3	<p>The amount of Test Calls to be conducted by operators of FTNS, mobile network, PNETS (for example, ETS, International Calling Card Services, Virtual Private Network Services, ISR, ISR fax and data, International Value-Added Network Services and ISP, MVNO is as follows:</p> <p>Table 1 – Telecommunications Metering Acceptance Model:</p> <table border="1"> <thead> <tr> <th colspan="2">Number of Test Calls Per Month Per Licence</th> </tr> <tr> <th colspan="2">FTNS/Mobile/PNETS</th> </tr> </thead> <tbody> <tr> <td>Reduced Inspection</td> <td>500</td> </tr> <tr> <td>Normal Inspection</td> <td>1250</td> </tr> <tr> <td>Tightened Inspection</td> <td>2000</td> </tr> <tr> <td>Acceptance No / Rejection No</td> <td>0,1</td> </tr> <tr> <td>AQL</td> <td>0.01%</td> </tr> </tbody> </table> <p>Each mobile network operator is required to conduct a number of Test Calls stated in Table 1 irrespective of number of licences issued to that particular operator for operation of second generation mobile services (i.e. GSM 900/1800, TDMA and CDMA technology).</p>	Number of Test Calls Per Month Per Licence		FTNS/Mobile/PNETS		Reduced Inspection	500	Normal Inspection	1250	Tightened Inspection	2000	Acceptance No / Rejection No	0,1	AQL	0.01%
Number of Test Calls Per Month Per Licence																	
FTNS/Mobile/PNETS																	
Reduced Inspection	500																
Normal Inspection	1250																
Tightened Inspection	2000																
Acceptance No / Rejection No	0,1																
AQL	0.01%																
		5.1.5	<p>Switching Rules – Normal to Tightened</p> <p>Under the normal inspection, operators are required to sample or generate a specific number of live or Test Calls every month in accordance with the requirements in Table 1. When two monthly Metering Tests out of five consecutive monthly Metering Tests (or fewer than five consecutive monthly Metering Tests) have been non-acceptable on original inspection, operators are required to implement the requirements of the tightened inspection.</p>														

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures
		5.1.6	<p>Switching Rules – Tightened to Normal Under the tightened inspection, operators are required to sample or generate a specific number of live or Test Calls every month in accordance with the requirements in Table 1. When five consecutive monthly Metering Tests that have been considered acceptable on original inspection, operators are allowed to switch to the normal inspection.</p>
		5.1.7	<p>Switching Rules – Normal to Reduced Under the normal inspection, operators are required to sample or generate a specific number of live or Test Calls every month in accordance with the requirements in Table 1. Operators can switch to the reduced inspection provided that all of the following conditions are satisfied: a) the current value of the switching score (see Section 5.1.8 of the QAM) is at least 30; and b) reduced inspection is considered desirable by the operator.</p>
		5.1.8	<p>Switching Score The calculation of the switching score shall be initiated at the start of normal inspection. The switching score shall be set at the zero value at the start and updated following the inspection of each subsequent monthly Metering Test on original normal inspection. When the acceptance number is 0, add 2 to the switching score if a specific monthly Metering Test is accepted; otherwise reset the switching score to zero.</p>
		5.1.9	<p>Reduced to Normal Under the reduced inspection, operators can switch to the normal inspection if any of the following conditions occur on original inspection: a) a monthly Metering Test is not accepted; or b) instructions given by the TA that normal inspection shall be re-instated.</p>
		5.1.10	<p>Discontinuation of Inspection If the cumulative number of monthly Metering Tests not accepted in a sequence of consecutive monthly Metering Tests on original tightened inspection reaches 5, the acceptance procedures from Section 5.1.4 to Section 5.1.9 of the QAM shall not be resumed until the operator concerned has already improved its quality assurance system in a manner to the satisfaction of the TA. Tightened inspection shall then be used as if Section 5.1.5 of the QAM had been invoked.</p>
5.2	Telecommunications Billing Acceptance Model	5.2.1	<p>Operators are required to perform a Billing Test each month by sampling a number of bills specified with respect to the applicable status in Table 2 below.</p>

QAM Sections	Descriptions	QAM sub-section	Indicative Procedures												
			<p>Table 2 - Telecommunications Billing Acceptance Model:</p> <table border="1" data-bbox="839 387 1449 667"> <thead> <tr> <th data-bbox="839 387 1190 439">Number of bills to be sampled each month</th> <th data-bbox="1190 387 1366 439">Acceptance No / Rejection No</th> <th data-bbox="1366 387 1449 439">AQL</th> </tr> </thead> <tbody> <tr> <td data-bbox="839 439 1190 495">Sample 32 bills in the reduced inspection</td> <td data-bbox="1190 439 1366 495">0,1</td> <td data-bbox="1366 439 1449 495">0.25%</td> </tr> <tr> <td data-bbox="839 495 1190 562">Sample 50 bills in the normal inspection</td> <td data-bbox="1190 495 1366 562"></td> <td data-bbox="1366 495 1449 562"></td> </tr> <tr> <td data-bbox="839 562 1190 667">Sample 80 bills in the tightened inspection</td> <td data-bbox="1190 562 1366 667"></td> <td data-bbox="1366 562 1449 667"></td> </tr> </tbody> </table>	Number of bills to be sampled each month	Acceptance No / Rejection No	AQL	Sample 32 bills in the reduced inspection	0,1	0.25%	Sample 50 bills in the normal inspection			Sample 80 bills in the tightened inspection		
Number of bills to be sampled each month	Acceptance No / Rejection No	AQL													
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Sample 80 bills in the tightened inspection															
		5.2.2	A specific monthly Billing Test is considered to be not acceptable if the individual total error sum over the total billed sum of any sampled telephone bill is greater than 1/10,000.												
		5.2.3	<p>Normal to Tightened Under the normal inspection, operators are required to sample a specific number of bills every month in accordance with the requirements in Table 2. When two monthly Billing Tests out of five consecutive monthly Billing Tests (or fewer than five consecutive monthly Billing Tests) have been non-acceptable on original inspection, operators are required to implement the requirements of the tightened inspection.</p>												
		5.2.4	<p>Tightened to Normal Under the tightened inspection, operators are required to sample a specific number of bills every month in accordance with the requirements in Table 2. When five consecutive monthly Billing Tests which have been considered acceptable on original inspection, operators are allowed to switch to the normal inspection.</p>												
		5.2.5	<p>Normal to Reduced Under the normal inspection, operators are required to sample a specific number of bills every month in accordance with the requirements in Table 2. Operators can switch to the reduced inspection provided that all of the following conditions are satisfied: a) the current value of the switching score (see Section 5.2.6 of the QAM) is at least 30; and b) reduced inspection is considered desirable by the operator.</p>												
		5.2.6	<p>Switching Score The calculation of the switching score shall be initiated at the start of the normal inspection. The switching score shall be set at the zero value at the start and updated following the inspection of each subsequent monthly Billing Test on original normal inspection. When the acceptance number is 0, add 2 to the switching score if a specific monthly Billing Test is accepted; otherwise reset the switching score to zero.</p>												

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures																
		5.2.7	<p>Reduced to Normal Under the reduced inspection, operators can switch to the normal inspection if any of the following conditions occur on original inspection:</p> <ul style="list-style-type: none"> a) a monthly Billing Test is not accepted; or b) instructions given by the TA that normal inspection shall be re-instated. 																
		5.2.8	<p>Discontinuation of Inspection If the cumulative number of monthly Billing Tests not accepted in a sequence of consecutive monthly Billing Tests on original tightened inspection reaches 5, the acceptance procedures from Section 5.2.3 to Section 5.2.7 of the QAM shall not be resumed until the operator concerned has improved its quality assurance system in a manner to the satisfaction of the TA. Tightened inspection shall then be used as if Section 5.2.3 of the QAM had been invoked.</p>																
6.1	Metering Tolerance	6.1.1	<p>Since the metering device of a network is usually not located at the customer end, the measured duration will have a small difference from that perceived by the customer. Therefore, it is necessary to take into account Metering Tolerance. Delay is the main cause of the Metering Tolerance.</p>																
		6.1.2	<p>The following are the Metering Tolerance for different services:</p> <table border="1" data-bbox="839 1182 1430 1563"> <thead> <tr> <th>Type of Services</th> <th>Tolerance</th> </tr> </thead> <tbody> <tr> <td>IDD on Fixed Network Service</td> <td>+/- 5100 ms</td> </tr> <tr> <td>Mobile Service</td> <td>+/- 6980 ms</td> </tr> <tr> <td>Mobile Prepaid Service</td> <td>+/- 7640 ms</td> </tr> <tr> <td>ETS Service</td> <td>+/- 4200 ms</td> </tr> <tr> <td>ETS Calling Card Service</td> <td>+ 7150 ms</td> </tr> <tr> <td>Fixed Network Calling Card Service</td> <td>+ 6550 ms</td> </tr> <tr> <td>Modem Dial-up Internet Service/IVANS</td> <td>+ 54.5 seconds</td> </tr> </tbody> </table>	Type of Services	Tolerance	IDD on Fixed Network Service	+/- 5100 ms	Mobile Service	+/- 6980 ms	Mobile Prepaid Service	+/- 7640 ms	ETS Service	+/- 4200 ms	ETS Calling Card Service	+ 7150 ms	Fixed Network Calling Card Service	+ 6550 ms	Modem Dial-up Internet Service/IVANS	+ 54.5 seconds
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		6.1.3	<p>Apart from Metering Tolerance for call duration, four more parameters need to be tested in the Metering Test. These parameters are Calling Party, Called Party, Charged Party and Charging Time Stamp.</p>																
		6.1.4	<p>No tolerance or error is allowed for recording of the Calling Party, the Called Party and the Charged Party. These parameters must be checked if they are relevant to the charging accuracy. Tolerance for the charging time stamp is +8.5 seconds and -5.5 seconds and this parameter needs to be checked if it is relevant to the charging accuracy.</p>																

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures
6.2	Billing Tolerance	6.2.1	During the Billing Test, call records from Billing System would be rerated by operators in accordance with the billing logic/tariff plan. This rerated per call charge will be compared with the per call charge appeared on the bill issued to the customer. No tolerance will be given to the difference between the rerated per call charge and also the per call charge appeared on the bill issued to the customer.
7.1	Metering Test	7.1.4	The Metering Test should involve the following steps: i) Generation of Test Calls ii) Collection of Test Call log iii) Collection of call details from the Billing System iv) Producing test result by comparing the Test Call log from call generator with the call details from the Billing System. Test Calls are accepted or rejected in accordance to the tolerance levels described in Section 6.1 of the QAM
		7.1.5	The distribution of numbers of Test Calls stated in Table 1 will be determined by applying either traffic ratio, revenue or number of customers of the operators concerned. In general, the operator must use the same consistent basis of either traffic ratio, revenue or number of customers in all pro-rata calculations for the numbers of Test Calls and Test Bills among relevant prepaid and postpaid services, and the use of pro-rata basis must be declared in DOM.
		7.1.6	Test Call Pattern In each Metering Test, operators should change test patterns quarterly in order to satisfy the randomness requirements on calling Directory Numbers (DNs), called DNs, charging DNs and call types.
		7.1.7	Directory Numbers Selection The operators should reserve a certain directory numbers (DN)s for the Metering Test. These DNs can be discrete spare numbers or belong to a specific number block. Operators can even use the internal network routing and testing numbers (i.e. numbers with the leading digits of '19') at their own convenience.
		7.1.8	Directory Numbers Selection The operators have to use a pseudo random /ballot method to draw a calling DN and a called DN for the Metering Test. However, the calling DN and the called DN must be changed periodically so as to satisfy the randomness requirement. In case of dial-up Internet, the operators have to use a pseudo-random / ballot method to draw 2 log-in ID numbers from the reserved number list. 8 access numbers should be randomly selected from the available access number pool. If the pool is smaller than 8, all access numbers should be tested. In case of calling card calls, operators can select 2 cards from a reserved pool of 100 cards.

QAM Sections	Descriptions	QAM sub-section	Indicative Procedures								
		7.1.9	<p>Test Call Types During the IDD test for ETS, mobile and fixed network services, operators are allowed to set up a loop back route to simulate the international call path. Operators may determine their own numbering scheme for performing this loop back test according to their operational needs.</p>								
		7.1.10	<p>Operators are allowed not to test indirect calls provided that they have tested the direct calls and could explicitly state and confirm that the call paths of indirect calls are having no significant difference to those of direct calls.</p>								
		7.1.11	<p>Call Duration The call duration to be used in the Metering Test is:</p> <table border="1" data-bbox="839 801 1447 969"> <thead> <tr> <th data-bbox="839 801 1142 846">Call Type</th> <th data-bbox="1142 801 1447 846">Test Call Duration (Minutes)</th> </tr> </thead> <tbody> <tr> <td data-bbox="839 846 1142 887">IDD Calls</td> <td data-bbox="1142 846 1447 887">1.5</td> </tr> <tr> <td data-bbox="839 887 1142 927">Mobile Calls</td> <td data-bbox="1142 887 1447 927">1.5</td> </tr> <tr> <td data-bbox="839 927 1142 969">Dial-up Internet Calls</td> <td data-bbox="1142 927 1447 969">10</td> </tr> </tbody> </table>	Call Type	Test Call Duration (Minutes)	IDD Calls	1.5	Mobile Calls	1.5	Dial-up Internet Calls	10
Call Type	Test Call Duration (Minutes)										
IDD Calls	1.5										
Mobile Calls	1.5										
Dial-up Internet Calls	10										
		7.1.12	<p>Tolerance of Measurement Equipment Operators need to enclose the relevant certificate(s) by the equipment manufacturers or recognized laboratories or self-declaration on the accuracy/tolerance of such measurement equipment in use in the DOM in order that these certificates and self-declaration information will be audited by OFTA on need basis. The tolerance for measurement equipment is +/- 1 second. Maximum tolerance for measurement equipment for call duration is +/- 1 second. In case of manual call, the tolerance of manual calls is the same as Section 7.3.6 of the QAM.</p>								
		7.1.13	<p>The total tolerance for accepting the Test Calls is the tolerance of measurement equipment plus the Metering Tolerance mentioned in Section 6.1 of the QAM.</p>								
		7.1.14	<p>Requirements on Test Execution Operators should follow the following requirements during the test execution:</p> <ul style="list-style-type: none"> i) Operators need to check the integrity of the time stamps of the calls if the call types of those calls selected are in time zone tariff plans. Operators should ensure to continually align and adjust the time stamp of the Test Call logs recorded by the call generators /receivers with the clock reference of the Hong Kong Observatory (time server "stdtime.gov.hk"); ii) Operators should produce test reports and self-declaration forms according to the requirements described in Section 9 of the QAM; iii) Metering tolerances for these three parameters, that is, start time, end time and call duration, strictly follow Section 6.1 of the QAM regardless of whether the parameters are directly obtained or 								

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures
			<p>indirectly derived from other parameters on the call record in the Billing System;</p> <p>iv) Total number of successful calls to be counted shall be no less than 99.9% of total Test Calls as specified in Table 1; and</p> <p>v) Operators may test more than the number of calls as specified in Table 1, but they shall use the valid calls (i.e. successful calls and those unsuccessful calls as specified in (iv) in sequence for checking and reporting purpose).</p>
		7.1.15	<p>Alternative Method by Per Call Test</p> <p>Operators have an option to perform the Metering Test in two steps according to their operational needs. However, the Metering Test is considered to have failed if either Part 1 test or Part 2 test failed. Both tests are performed once every month. Sections 7.1.15 to 7.1.21 of the QAM are only applicable for operators who choose to perform the Alternative Method by Per Call Test.</p>
		7.1.17	<p>Part 1 test</p> <p>This part is the same as that described from Section 7.1.3 to 7.1.14 of the QAM, except that the call details for comparison with the Test Call log are collected from the metering point output instead of the Billing System. The requirements specified in Section 7.1.3 to Section 7.1.14 of the QAM are applicable to this part of the test.</p>
		7.1.18	<p>Part 2 test</p> <p>Live calls are taken as samples for comparison.</p>
		7.1.19	<p>Part 2 test</p> <p>The test should involve the following steps:</p> <p>(i) Collection of CDR samples of live calls from metering point output on random basis;</p> <p>(ii) Collection of call details from the Billing System; and</p> <p>(iii) Producing test result by comparing the CDRs from the metering point and call details from the Billing System. Test Calls are accepted if the parameters set out in Section 6.1 of the QAM are exactly matched.</p>
		7.1.20	<p>Number of Test Calls and Acceptance Number</p> <p>The number of Test Calls required in each test and the acceptance level are specified in Table 1.</p>
		7.1.21	<p>Call Sampling</p> <p>The calls are sampled according to a random selection of a calling number during a randomly selected period in the month when the Part 1 test is taken place.</p>
7.2	Billing Test	7.2.2	<p>Operators will calculate the billing charges of calls by applying their own billing logic and using the call detail records information stored in their Billing Systems (ABij) which is exactly the same point of the Billing</p>

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures
			System used for Metering Test under Section 7.1.4 (iii) or Section 7.1.19 (iii) of the QAM. Afterwards, operators will compare the charges calculated from their billing logic (AB _{ij}) with the charges actually billed to customers (A''B _{ij}). The absolute differences between these two charges in a bill will be added and regarded as total error in a bill ($\sum D_{ij}$).
		7.2.3	The actual bill amount is the summation of all chargeable values that the customer needs to pay to the operator concerned. The charge that the customer needs to pay to the operator is regarded as positive value, otherwise it will be regarded as negative value.
		7.2.4	All the billing charges of positive value in a sampled bill will be added up and regarded as the actual bill amount (T _i) in a bill. All other negative values such as monetary rebates, free minutes, volume discount etc will not be counted in this amount. These billing charges include all timed/usage charges and non-timed/usage charges in that bill. Any billing charge of negative value will be checked arithmetically but will not be counted in the actual bill amount. When operators provide rebates in terms of time to their customers, the input information (time rebated from previous months or free minutes carried forward) can be assumed to be correct. Operators only need to perform the checking on the arithmetic calculation. When a sampled bill consists of negative chargeable values only, this sampled bill will be discarded and substituted by another sampled bill.
		7.2.5	<p>The passing criteria of an individual bill <i>i</i> is: $\sum D_{ij} / T_i \leq \\$1 / \\$10000$ where</p> <ul style="list-style-type: none"> - <i>i</i> refers to a bill and <i>j</i> refers to a call - T_i refers the actual bill amount in a bill (down to cents place) - D_{ij} refers to per call error in a specific bill <i>i</i> and it equals to the absolute difference of AB_{ij} and A''B_{ij} (D_{ij} = AB_{ij} – A''B_{ij}) - AB_{ij} refers to operator billed per call charge calculated from operator's billing logic (down to cents place) - A''B_{ij} refers to per call charge appeared on customer's bill (down to cents place) - Arithmetic check based on charges actually billed to customers is counted as one of the passing criteria in a bill check
		7.2.6	The monthly Billing Test is considered as failed if any individual sampled telephone bill is failed.
		7.2.7	Operators shall ensure a random or pseudo-random selection of samples and also declare the selection process in the DOM. Operators should use one of the following parameters which would cover all their customers to randomize the selection of the samples. Random selection parameters are account number, directory number or invoice number.

QAM Sections	Descriptions	QAM sub-section	Indicative Procedures						
		7.2.8	Operators can use electronic records of the bills in the Billing System instead of hardcopy bills, provided that they are consistent with the bills actually issued to customers. Operators should have measures to ensure the consistency of the two records.						
		7.2.9	No Billing Test is required if the values of bills are calculated and checked by the other carriers. However, it is still necessary for operators to conduct an arithmetic check of these billing data to verify the correctness of the final bill value. If only raw data (e.g. call duration) is provided by other carriers, operators are still required to perform the associated Billing Test based on these raw data.						
		7.2.10	<p>Maximum Calls Per Bill If the number of calls of a sampled bill is greater than the maximum calls per bill, then this bill can be discarded. The maximum calls per bill for the Billing Test is defined as:</p> <table border="1" data-bbox="839 936 1449 1016"> <tr> <td data-bbox="839 936 1142 965">IDD</td> <td data-bbox="1142 936 1449 965">35 calls per bill</td> </tr> <tr> <td data-bbox="839 965 1142 994">Mobile</td> <td data-bbox="1142 965 1449 994">191 calls per bill</td> </tr> <tr> <td data-bbox="839 994 1142 1016">Dial-up Internet</td> <td data-bbox="1142 994 1449 1016">34 calls per bill</td> </tr> </table>	IDD	35 calls per bill	Mobile	191 calls per bill	Dial-up Internet	34 calls per bill
IDD	35 calls per bill								
Mobile	191 calls per bill								
Dial-up Internet	34 calls per bill								
		7.2.11	<p>Minimum Call Per Bill The minimum call per bill in Billing Test is defined as 1.</p>						
7.3	Pre-paid Services	7.3.2	<p>Number of Test Calls Operators can use either traffic ratio, revenue or number of customers to determine the number of Test Calls (X) for the pre-paid services in the Metering Test whereas X is a portion of Test Calls in Table 1.</p>						
		7.3.3	<p>Number of Pre-paid Cards Operators can use either traffic ratio, revenue or number of customers to determine the number of pre-paid calling cards/pre-paid SIM cards (Y) for the Billing Test whereas Y is a portion of telephone bills in Table 2.</p>						
		7.3.4	<p>Billing Integrity Standard As far as the Billing Test is concerned, the absolute summation error value of the inaccurately billed calls in a pre-paid calling card/pre-paid SIM card shall not exceed 1 in 10,000 of the value of total billed sum in that pre-paid calling card/pre-paid SIM card.</p>						
		7.3.5	<p>Test Method Automatic test for the pre-paid services is highly recommended and shall be adopted at a first place. However, if automatic generation of pre-paid calls is not feasible, then manual generation of Test Calls for pre-paid services is also acceptable.</p>						
		7.3.6	<p>Tolerance of Call Start Time and Call Stop Time In case the call generation and call recording have to be</p>						

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures
			undertaken manually, the tolerance of call start time or call end time is +/- 2 seconds.
		7.3.7	Accuracy of IVRS Voice Prompt Operators shall self-declare in DOM that the accuracy of the pre-paid calling card or pre-paid SIM card system in the conversion of electronic record to voice message.
		7.3.8	Operators can select either separate or integrate test for the pre-paid service test. Sections 7.3.9 to 7.3.13 of the QAM are applicable for Separate Test, while Sections 7.3.14 to 7.3.17 of the QAM are applicable for Integrated Test.
		7.3.9	The Metering Test is similar to Section 7.1 of the QAM. The following parameters should be checked, wherever applicable, such as calling party, called party, call duration, charged party (e.g. account number) and charging time stamp etc. The method of selecting Directory Numbers is set out in Section 7.1.7 of the QAM. The number of pre-paid cards required for Metering Test is at least 2.
		7.3.10	The Billing Test is similar to Section 7.2 of the QAM. All in-service pre-paid SIM/calling cards should be sampled for the Billing Test. In particular, procedures should be derived in such a way to ensure samples are chosen randomly or pseudo-randomly.
		7.3.11	Sampling of calls/cards/bills can be made in either automatic way or manual ballot way. All the sampled records (calls, bills or cards etc.) must be listed out clearly irrespective of whether the calls/bills/cards were used, discarded or any other possible uses.
		7.3.12	If sampling of cards is a manual process, then all the cards drawn including filtered cards and selected cards must be recorded.
		7.3.13	Only the calls made in previous month of the reporting period shall be included for the test. The maximum and minimum numbers of calls per card for the pre-paid system are the same as those per bill for post paid system.
		7.3.14	The charged party shall be verified when the Metering System is tested. Call charge should be calculated by applying the billing logic of the billing/pre-paid system. This call charge is verified against the actual call charge deducted by the prepaid system. The actual call charge deducted by the prepaid system can be checked and recorded by listening to the IVRS voice or other methods whereas appropriate.
		7.3.15	In case the test is failed, operators shall conduct investigations, report the sources of faults (Metering System, Billing System, or both) and specify the remedy actions taken to rectify the faults to OFTA. In case call

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures
			duration record is not retrievable from the Prepaid Service Platform, the operator must submit sufficient supporting information for its investigation and argument to declare that the fault is due to Metering System alone, Billing System alone, or both of them.
		7.3.16	The passing criteria for pre-paid services using integrated platforms are similar to Section 7.2.5 of the QAM. In case of pre-paid SIM cards offered by mobile operators which can make both IDD calls and mobile calls, the number of pre-paid IDD calls and pre-paid mobile calls are derived from the total number of pre-paid calls of that mobile operator using either traffic ratio, revenue or number of customers. The number of pre-paid cards required for integrated test is at least 2.
		7.3.17	<p>General Procedure The general procedures for testing the prepaid systems are to:</p> <ul style="list-style-type: none"> a) Check the prepaid cards for sufficient monetary value for making the Test Calls; b) Synchronize the clock with Hong Kong Observatory, if necessary; c) Record the balance at the beginning of the tests; d) Check the charged party (or card identifier) and duration during the Metering Test whereas calling party, called party and time stamp would be checked if necessary; e) Record the remaining balance at the end of the tests; f) Record the before-call and after-call balances to obtain the per-call charge amount in case the per-call charge amount is not available from the prepaid system; g) Record the deviation of the charging amount calculated manually and the amount recorded by the prepaid system for each call; h) Add the absolute differences between manually calculated charge and the actual deducted amount for each call to be regarded as total error for the prepaid service; i) Sum all calculated chargeable values to become the actual bill amount; j) Check whether the passing criteria for the prepaid card is fulfilled that the ratio of the total error and the actual bill amount does not exceed 1: 10000 and that the arithmetic check set out in Section 7.2.4 of the QAM is passed; and k) Observe that the previous agreed procedures for handling rounding treatment for post paid service were applicable to prepaid service.
9.1	Introduction	9.1.1	Operators should prepare the testing report on monthly basis and submit the self-declaration forms for the compliance status, Metering Test and Billing Test to OFTA quarterly using the format attached in Annex 2, Annex 3 and Annex 4 of the QAM respectively.

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QAM Sections	Descriptions	QAM sub-section	Indicative Procedures
		9.1.2	All the measurements or test results generated and collected during the Metering Tests and Billing Tests must be properly recorded and documented in the Monthly Test Report. Operators should not selectively submit test data collected from the test for test report preparation purpose.
9.2	Self-Declaration Procedures	9.2.4	Operators must submit the self-declaration forms to OFTA by the twenty-fifth of the month immediately following the quarter in which the tests are conducted (“the Submission Date”). If any test results done within this quarter are failed, operators should also submit the monthly test reports together with the self-declaration forms to OFTA by the Submission Date. Allowable extension to the end of the calendar month of the Submission Date can be given if request is made in advance to OFTA before the Submission Date through email at meter@ofta.gov.hk .
		9.2.6	The one who signs and submits the self-declaration forms to OFTA should be at the operator’s directorate level or authorized staff. Operator’s submissions of self-declaration forms and test reports should use the format/template as defined and given in the QAM.
		9.2.7	It is the responsibility of individual operators to submit the self-declaration forms and test reports to OFTA on time.
9.3	Format of Test Report	9.3.1	Operators are required to prepare the test report about the Metering Test and Billing Test performed. In general, the test reports should be sufficient to derive the results of the test for inspection purpose. Therefore, the test report should at least keep the records of the checked test data. Sections 9.3.2 to 9.3.9 set out the details of the formats of the Metering Test Report and Billing Test Report.
		9.3.10	Although there is no need for operators to provide the passed test reports regularly to OFTA, operators should keep them for at least 3 years in case there is a need for OFTA or CPA to make reference to them.