

**Billing and Metering Accuracy of  
Public Telecommunications Services in Hong Kong**

**Statement of the Telecommunications Authority  
Hong Kong**

**4 August 2000**

**Introduction**

On 30 May 2000, the Telecommunications Authority (TA) issued a consultation paper entitled “Consultation Paper on Billing and Metering Accuracy of Public Telecommunications Services in Hong Kong” which aimed to seek industry’s comments on a proposed Meter Approval Scheme (the proposed Scheme) to ensure the accuracy and integrity of the metering and billing systems of operators in the telecommunications industry. The consultation paper addressed the background, the needs and benefits and specific proposals on the implementation of the proposed Scheme.

2. The deadline for submission of comments was 30 June 2000. 19 submissions were received from the following organizations. A copy of their submissions is posted on the OFTA homepage at [www.ofta.gov.hk](http://www.ofta.gov.hk).

- (1) Cable & Wireless HKT Telephone Limited (CWHKTC)
- (2) New T&T Hong Kong Limited (New T&T)
- (3) Hutchison Global Crossing Limited (HGC)
- (4) New World Telephone Limited, New World PCS Limited (NWT/NWPCS)
- (5) Hong Kong Cable Television Limited (HKCTV)
- (6) Cable & Wireless HKT CSL Limited (CWHKTCSL)
- (7) Hutchison Telephone Company Limited (HTCL)
- (8) SmarTone Mobile Communications Limited, iSmart.net Limited and SmarTone Broadband Services Limited (collectively referred to as “SmarTone”)
- (9) Mandarin Communications Limited (Mandarin)
- (10) Peoples Telephone Company Limited (Peoples)
- (11) City Telecom (H.K.) Limited (CTI)
- (12) Eastar Technology Limited (Eastar)
- (13) Cable & Wireless HKT IMS Limited (CWHKTIMS)

- (14) Consumer Council
- (15) Information & Management Systems (I&MS)
- (16) The Hong Kong Institution of Engineers (HKIE)
- (17) CLP Telecommunications (CLP)
- (18) Tiglion Consultancy Company Limited
- (19) TeleResources Pty Limited

### **Needs of the Proposed Scheme**

3. Consumer Council, CWHKTC, CWHKTCSL, CWHKTIMS, I&MS and Mandarin supported the implementation of the proposed Scheme in order to ensure the accuracy of the billing and metering systems used by the telecommunications networks operators and service providers.

4. On the other hand, submissions from other network operators/service providers were generally not supportive of the implementation of the proposed Scheme. Most of them considered that self-monitoring by them and *ad hoc* checking by the TA were sufficient. They further considered that customer complaints on billing were only a small part of the overall complaints and hence implementing the proposed Scheme could not reduce the number of customer complaints significantly. In addition, complaints on billing were sometimes due to misunderstanding of the bill but not related to the confidence of the customers on accuracy of the metering system.

5. New T&T considered that the proposed Scheme would have long-lasting financial, technical and operational impacts on the telecommunications industry, individual network operators and service providers. The benefits of the proposed Scheme did not warrant the extent of the resources involved. HGC, HTCL, NWT, NWPCS and SmarTone further considered that the current self-appraisal systems work well and it was not necessary to change to a different arrangement which did not cater for the specific circumstances of individual operators. In addition, it was believed that market competition would force the network operators/service providers to enhance customer satisfaction thus obviating the need for a meter approval scheme.

6. The TA does not agree that consumer complaints on billing constituted only a small part of the overall number of complaints received. Paragraph 6 of the consultation paper had already given the number of billing-related complaints received by the Consumer Council since 1996. In 1998, 1999 and the first half of 2000, billing-related complaints constituted 47%, 53% and 69% respectively of the

total number of complaints received. It can be noted that the trend of billing-related complaints was on the increase.

7. The TA accepts that billing-related complaints did not always originate from metering or billing inaccuracy. Many complaints were related to whether the detailed methods for the calculation of charges were clearly set out in tariff tables, sales literature or contract documents from the network operators/service providers, and whether the details set out were explained to, or understood by, the customers. However, the existing self-appraisal systems are inadequate in that, because of a lack of common standards, measurement, monitoring, auditing, reporting and publication procedures, they do not give the customers and the TA sufficient confidence that the metering and billing systems are functioning to the required standard in conformity with licence conditions.

8. The TA notes that network operators/service providers not supporting the proposed Scheme are concerned about the additional resources required for the implementation of the proposed Scheme. In fact, the TA had already proposed in the consultation paper a version of the Scheme which is simplified from that originally proposed by the British Approvals Board for Telecommunications (BABT). The cost of operating the Scheme must be considered as part of the operating costs for the provision of the services under the licences to fulfil the operators' licence obligations. The concerns of the network operators/service providers with regard to costs and the objectives of the proposed Scheme can be dealt with in the proposed industry forum to work out details of the metering approval scheme.

9. Having considered the received comments and the significant increase of complaints on billing accuracy in recent years, the TA considers that it is necessary to strike a balance between the additional costs due to the proposed Scheme and the benefits that would be brought to the customers. Based on these considerations, the TA forms the view that a metering approval scheme should be introduced as soon as possible with a view to ensuring compliance with licence obligations with regard to metering and billing accuracy and minimizing the amount of disputes between the customers and network operators/service providers on charging issues.

### **Scope of the proposed Scheme**

10. In the consultation paper, the TA proposed that the scope of the proposed Scheme should initially be applied only to those charged services of local,

international and mobile services based on usage or time charge, especially for the IDD types of services. The TA also proposed that both network operators and service providers would be included in the proposed Scheme. However, the proposed Scheme would not apply to those flat-rate services such as some public radio paging, direct exchange line and Internet access service packages, which were based on flat-rate monthly service charges. The proposed scope was supported by most submissions including the Consumer Council and the network operators/service providers.

11. New T&T considered that the proposed Scheme should exclude the carrier-to-carrier and carrier-to-service provider traffic because they were not related to the main objective of the Scheme, which aimed to improve the confidence of the customers on the accuracy of metering by the network operators and service providers. CWHKTC also considered that it was not cost-effective to include in the proposed Scheme services with comparatively fewer complaints. Besides, a number of submissions proposed to focus the scope and resources in usage based services which have great financial implications, for example, IDD services. In considering that the purpose of the proposed Scheme is to enhance the metering and billing integrity of public telecommunications services, and interconnecting network operators and service providers *are* also customers of network operators/service providers providing the interconnecting telecommunications services, the TA does not consider that any specific types of usage or time-rated telecommunications services, be they provided to end-users or to other service providers or network operators, should be exempted from the proposed Scheme. However, in the discussions on implementation in the industry forum, the details related to the proposed Scheme as applied to services provided to end-users should be worked out first.

### **Billing and Metering Integrity Standards**

12. Most submissions including those from the Consumer Council, CWHKTC, CWHKTCSL, CWHKTIMS, I&MS, Peoples, SmarTone and Mandarin supported the proposed development of billing and metering integrity standards. The Consumer Council further suggested that the TA should provide to the industry guidelines for the purpose of developing a common standard capable of resolving problems relating to customers' confidence in billing accuracy.

13. The TA welcomes the industry's general support to the development of accuracy and integrity standards for metering and billing in Hong Kong. The TA

notes the conflicting views from the industry of having a common or separate standards for different type of services. SmarTone considered that there should be one common standard in the telecommunications industry and the standard should be applied in carrier-to-carrier billing settlement. New T & T considered that there should be two separate standards, namely retail billing and wholesale billing/carrier settlement. The TA also notes the industry views on the relevancy of overseas standards to the local operating environment and their views that the proposed standard should be formulated in consultation with the industry.

14. The TA acknowledges these views from the industry. As these issues would involve detailed consideration in both technical and operational arrangements, the TA intends to leave these issues for deliberation in the proposed industry forum. It is expected that the industry forum would submit a recommendation to the TA for consideration in due course.

### **Self Appraisal System**

15. The Consumer Council welcomed the proposed self-appraisal system. CWHKTC further supported the TA to establish an industry forum and to define the implementation details of the system and the common procedures to be followed by the industry.

16. HGC, HTCL and NWT/NWPCS preferred to continue using their own monitoring systems on metering accuracy. Instead of requiring all network operators/service providers to comply with a self-appraisal system, they considered that the TA should only require those network operators/service providers having metering/billing problems to take additional measures to improve billing and metering accuracy. Such operator-specific approach would avoid burdening network operators/service providers who had achieved satisfactory standards in their billing/metering accuracy with additional demands for their resources to implement the proposed Scheme. SmarTone counter-proposed that network operators/service providers should only submit an appraisal for their new services or if there were major changes in their networks.

17. Mandarin, New T&T, SmarTone and Peoples were concerned about the uncertainties and complexities involved in the preparation of the Quality Assurance Manual by the network operators/service providers. It might be helpful if the TA could assist the industry to draw up a standardized Quality Assurance Manual.

TeleResources, an Australian supplier of metering and billing equipment opined that network operators/service providers should adopt systems with compatible outputs to facilitate data collation, analysis and comparison.

18. After considering all the comments, the TA is of the view that the proposed self-appraisal system should be implemented, as it would facilitate and ensure the network operators/service providers' compliance with the billing and metering integrity standards. In addition, the proposed self-appraisal system would also increase the confidence of the customers on the metering and billing accuracy of the network operators/service providers. The details of the self-appraisal system such as procedures, testing methods, testing periods, etc. would be discussed in the proposed industry forum.

### **Auditing System**

19. The Consumer Council supported the proposal, as the auditing system would increase the consumers' confidence in the self-appraisal system. To further enhance the confidence level, both Consumer Council and Mandarin proposed that the TA might consider assigning an auditor or a panel of auditors for selection by the network operators and service providers.

20. Some operators including New T&T, HGC and HTCL queried the effectiveness of an auditing system, as the auditors might not have the technical know-how to certify their submissions. If the auditing is based on counter-checking the information supplied by the network operators/service providers, it was not justified for the network operators/service providers to spend additional cost for such certification. Some operators considered that internal auditing by them was sufficient. New T&T further considered that any system to be adopted should not create undue cost burden to the network operators/service providers and doubted the necessity and benefits of having an audited and certified measurement result.

21. The TA agrees with the Consumer Council that an auditing system would increase the confidence of consumers in metering accuracy. Compared with the cost involved for the preparation of the Quality Assurance Manual, employing certified public auditor should not impose substantial financial burden to the network operators/service providers. It is believed that the benefits of the auditing system would outweigh its associated costs. Regarding the logistics of the auditing system, e.g. whether the audit should be carried out by technical or administrative means,

whether the network operators/service providers could appoint their existing auditors for metering, etc., the TA considers it appropriate that they should be discussed in the proposed industry forum to address the industry's concerns.

### **Monitoring System**

22. In the consultation paper, the TA proposed that all network operators/service providers should submit to him the certified measurement results and the number of customer complaint cases (normalized to the number of bills issued) or charge disputes with customers on a regular basis. The TA would then publish on OFTA's homepage and update from time to time all the received information including the names of network operators/service providers whether they are in compliance with the metering and billing accuracy and integrity standards or not.

23. The Consumer Council supported the TA's proposal because it was beneficial for consumers if they were aware of the compliance status and performance of individual network operator/service provider. The Consumer Council also suggested the adoption of a "Trustworthy System" in the telecommunications industry in order to enhance the trust of the customers on the accuracy of the network operators/service providers' metering and billing systems.

24. Regarding publishing customer complaints, the Consumer Council pointed out the necessity for a standardized reporting format in order to avoid collecting inadequate or distorted information and to prevent potential abuse of the reporting system. In addition, the Consumer Council also recommended the provision of online metering billing and enquiry systems for customers as an additional mean to monitor the performance of billing and metering systems of the network operators/service providers.

25. Although there were no objection to publishing the network operators/service providers' compliance status with the metering and billing integrity standards, all submissions from the network operators/service providers had reservations as to publishing the complaint statistics in the public domain including OFTA's homepage. It was generally considered that complaint statistics might be confusing and misleading to the consumers. Other concerns raised by the network operators/service providers included:

- manipulation of customer complaints statistics

- network operators/service providers with larger customer base might have a higher number of complaints but a smaller percentage of dissatisfied customers
- it was complicated to sort out disputes due to metering/billing problem
- the complaint statistics could not reflect the performance in metering and billing among network operators/service providers employing different product plans and hence billing complexity
- the figures on number of bills issued would be commercially sensitive

26. Instead of publishing customer complaints on public domain, New T&T suggested the TA to consider using complaint figures from the Consumer Council as an indicator for monitoring purpose. HGC and HTCL proposed that the TA should only take actions against network operators/service providers subjecting to repeated complaints by customers. Peoples suggested that only successful complaints cases related to billing accuracy should be reported and published.

27. The TA acknowledges that the Consumer Council's proposed "Trustworthy System" would promote the incentive of the network operators/service providers in achieving full compliance with the proposed Scheme. The TA would consider its feasibility when deciding the details in publishing the network operators/service providers' compliance status in the industry forum.

28. Regarding the proposed publishing of customer complaints, the TA shares the view of the Consumer Council that it could be beneficial for the consumers in order to assist them in making informed choices when selecting network operators/service providers. The TA is of the view that complaint statistics should be published for public information. The major issue is in fact whether the complaint statistics could provide a fair comparison among various network operators and service providers.

29. The TA acknowledges the Consumer Council's proposal that a standardized format for reporting complaint figures is essential to prevent potential abuse of the reporting system. The number of complaints should also be normalised to the number of customers or bills issued so as to convey a fair picture of the performance of the operators concerned. The TA would further liaise with the network operators/service providers on details of the reporting system, types and format of information to be published and other concerns of the network operators/service providers on the proposed publishing of customer complaints on the public domain.

## **Industry Forum and Implementation Timeframe**

30. The Consumer Council welcomed the TA's intention to set up an industry forum and further recommended government's active participation in the forum. Except HGC and HTCL, the network operators/service providers had no objection to setting up the proposed industry forum but had reservations to completing the task in 3 months' time as proposed by the TA in the consultation paper. CTI commented that it was difficult for an industry forum to effectively cater for the different billing complexities of the network operators and service providers.

31. The TA considers that an industry forum is essential to the successful implementation of the Metering Approval Scheme in Hong Kong. In addition, the industry forum could also address in detail the various concerns of the industry and fine tune any implementation details in the course of discussions at the industry forum. The TA is therefore of the view that an industry forum should be set up as soon as possible to ensure early implementation of the proposed Scheme.

## **Conclusion**

32. Having considered the comments received, the TA concludes that Metering Approval Scheme should be implemented in Hong Kong in order to enhance the confidence of the customers on billing accuracy of the industry. In order to ensure early implementation of the proposed Scheme, the TA decides that an industry forum shall be established shortly to work out details of the proposed Scheme including the metering and billing accuracy and integrity standard, self-appraising system, auditing system, monitoring system and implementation plan.

**Office of the Telecommunications Authority**

4 August 2000