

The Oftel Metering and Billing Direction

A statement issued by the Director General of
Telecommunications

22 July 2003

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Summary

S1 The document annexed to this Statement is the Oftel Metering and Billing Direction (the "Direction"), given by the Director and published today, 22 July 2003, pursuant to General Condition 11 ("Metering and Billing") of the General Conditions of Entitlement. The General Conditions of Entitlement were set by the Director today by way of publication of a Notification pursuant to section 48(1) of the Communications Act 2003, and are contained in the Schedule to that Notification. The Direction contains the technical requirements that a Total Metering and Billing System must be compliant with in order to gain Approval. The Direction published on 9 July, which was published in case the Communications Bill failed to receive Royal Assent by 25 July 2003 and it was necessary to make interim statutory instruments to implement the new EU Directives, should now be discarded.

S2 The Direction is derived from the Oftel Metering and Billing Standard OTR 003:2001 which has been recast in a form consistent with the new regulatory framework. It does not substantively change the existing Metering and Billing Standard. However it has been necessary to revise some of its terminology in order to align it with the concepts and terms brought into use by the new regulatory framework.

S3 This Statement was preceded by a consultation on the Oftel Metering and Billing Direction published on 24 March 2003. Chapter 2 of this Statement summarises and comments on the responses made to the consultation.

Chapter 1

Introduction

1.1 The document in the Annex to this Statement is the Of tel Metering and Billing Direction (the 'Direction') , given and published today, 22 July 2003, pursuant to General Condition 11 ('Metering and Billing') (the 'Condition') of the General Conditions of Entitlement. The General Conditions of Entitlement were set by the Director today by way of publication of a Notification pursuant to section 48(1) of the Communications Act 2003 (the 'Act'), and are contained in the Schedule to that Notification.

(http://www.of tel.gov.uk/publications/eu_directives/2003/cond_final0703.pdf.) The Act received Royal Assent on 17 July 2003 and relevant provisions of the Act will come into force on 25 July 2003, pursuant to the Communications Act 2003 Commencement No.1) Order 2003 (the 'Commencement Order'). However the Director is able to give the Direction today in view of section 13 of the Interpretation Act 1978, which allows for the anticipatory exercise of powers under an Act after its passing but prior to its entry into force as may be necessary or expedient for the purpose of giving full effect to the Act or any provision of the Act at or after the time when it comes into force. In addition, the Director is able to exercise powers under the Act pursuant to section 408 of the Act and Article 3(1) of the Commencement Order, until Of com assumes those powers at a later date.

1.2 The Condition includes an obligation that communications providers who provide publicly available telephone services and have a relevant annual turnover in excess of £40m must seek Approval of their Total Metering and Billing Systems (TMBSs). The Direction contains the technical and other requirements with which a TMBS must comply in order that it may be approved.

1.4 The Direction is not a new document. It is derived from the Of tel Metering and Billing Standard OTR 003:2001 and essentially replicates that standard in a form that is consistent with the new regulatory framework. The procedures of the new framework require that the existing standard be recast in the form of a Direction in accordance with section 49 of the Act.

1.5 As referred to above, the Act has received Royal Assent, the General Conditions of Entitlement were set by the Director using powers under the Act earlier today, and the Director is therefore able to give the Direction pursuant to the Condition. The earlier version of the Direction, published on 9 July 2003 (see <http://www.of tel.gov.uk/publications/licensing/2003/metbilld0703.htm>), to accompany the draft Electronic Communications (General Conditions) Regulations 2003 (the 'Draft Regulations'), should therefore now be discarded. The Draft Regulations were intended to come into force on 25 July 2003 as part of an interim Statutory Instrument package to implement the four new EU Directives on electronic communications in the event that the Communications Bill had not have received Royal Assent by that date. The earlier version of the Direction would have applied had the interim statutory instruments been made.

1.6 Further information about the background to the General Conditions, the new regulatory regime in general, etc can be found in the consultation on the Of tel Metering and Billing Direction posted at

www.of tel.gov.uk/publications/licensing/2003/billdirec0303.htm

Chapter 2

Consultation on the Direction

2.1 The Director's proposal to make the Direction was set out in a Notification published under Clause 46(4) of the Communications Bill (as it then was) on 7 April 2003, at www.oftel.gov.uk/ind_info/licensing/determinations/2003/metbillnot0303.htm . A consultation on the draft Direction began on 24 March and ended on 16 May 2003. The consultation document includes explanatory material about the new regulatory framework and is available at www.oftel.gov.uk/publications/licensing/2003/billdirec0303.htm .

Summary of responses

2.2 Responses were received from five organisations (BT, BSI, Orange, T-Mobile and Telewest) and have been published at www.oftel.gov.uk/publications/responses/2003/billdirec0303/index.htm

2.3 A number of comments were about the Condition rather than the Direction itself. The general conditions of entitlement have already been the subject of two separate consultations, but where the comments have some bearing on the Direction they are considered here.

2.4 One such point was that the names of recognised Approval Bodies should not be included in the condition itself, but in a separate document such as the Direction, which would be easier to amend. However, within the framework set by the Act, any formal document in which Approval Bodies are listed would be subject to the same procedural requirements before it could be modified as the Condition itself. There is therefore nothing to be gained by omitting the names of the Approval Bodies from the Condition.

2.5 Several responses were concerned by the omission of the "Scope" section of the standard from the Direction. It was felt that the distinction drawn in the "Scope" between TMBSs used for retail and wholesale purposes on the one hand, and charging and billing for interconnection and settlement charges on the other, was helpful and should not be lost. As the term "TMBS" is linked by its definition in the Condition to end-users' bills it is not necessary to rely on the wording of the "Scope" to make this distinction. However with the intention of reinforcing the similarity between the standard and the Direction, the "Scope" section has been reinstated in the Direction as clause 2, subject to minor amendments. For the same reason clause 2.7 of the draft Direction has been reinstated as new Clause 12.

2.6 One response urged the replacement of the term "end-user" throughout the Direction by "user". However "end-user" applies to any customer or user of a public electronic communication service, whether an individual or a corporate

body, who is not himself a communications provider so the use of the term is appropriate. Moreover, the Direction is only applicable within the context of the Condition where the term used is "end-user". For this reason the adoption of the term "user" in the Direction would not be appropriate.

2.7 There was concern that the definition of TMBS did not explicitly exclude the recording and billing of sales of products or services that are not electronic communications services. The definition of TMBS in the Condition, which applies to the Direction, has been amended to make it clear that it is limited to charges arising from the provision and usage of electronic communications services.

Minor amendments to the Direction.

2.8 The amendments that follow have, other than the first, been inspired by comments received in the consultation. The numbering is that of the published draft Direction.

Clause 3.5: "end-user" for "customer";

Clause 5.2: reinstatement of "This applies to both aggregated and individual charges";

Clause 6.1: reinstatement of "...timeliness and...";

Clause 6.3: the proposal to replace "systematic processes" by "appropriate diligence" has not been accepted as the term "systematic processes" does not bear the weight which the proposal attributes to it;

Clause 7.1: reinstatement of "...and enforce the use of effective...", insertion of "Total Metering and Billing System" before the word "operation";

Clause 10: omission of "SUS" acronym.

Chapter 3

Reasons for giving the Direction

3.1 Having considered the responses received to the consultation and having amended the Direction as appropriate, the Director has decided to give the Direction pursuant to the Condition.

3.2 In giving this Direction the Director is satisfied that it meets the tests set by section 49(2) of the Act. The Direction is objectively justifiable, in that it is required to ensure protection of consumers through billing accuracy. It is not unduly discriminatory, in that although it affects only those communications providers as set out in paragraph 11.3 of the Condition, that is justified because it ensures that the requirements of the Direction are only likely to affect those providers whose subscribers account for the majority of end-users in the UK. It is proportionate in that the requirements of the Direction are only likely to affect those providers whose subscribers account for the majority of end-users in the UK. It is transparent in that the terms of the Direction and its effect have been consulted on and the reasons for making it were set out in the consultation document and the notification.

3.3 In giving the Direction the Director has considered his duties as set out in section 4 of the Act, in particular the third Community requirement to promote the interests of all persons who are citizens of the European Union.

Annex

The OfTel Metering and Billing Direction

Foreword

- F1 This document, the OfTel Metering and Billing Direction, is made pursuant to General Condition 11 ('Metering and Billing') of the General Condition of Entitlement ('the Condition') on 22 July 2003. The General Conditions of Entitlement were set by the Director on 22 July 2003 by way of publication of a Notification pursuant to section 48(1) of the Communications Act 2003, and are contained in the Schedule to that Notification. The Condition provides that a Communications Provider that is subject to paragraph 11.3 of the Condition shall apply to an Approval Body for Approval of its Total Metering and Billing System and shall obtain such Approval as soon as is practicable. Approval is defined in the Condition as an approval granted by an Approval Body where the Communication Provider's Total Metering and Billing system is compliant with this Direction. 'Approval Body' is defined in the Condition as the British Approval Board for Telecommunications (BABT), the British Standards Institution (BSI) or National Quality Assurance Ltd (NQA).
- F2 Paragraph 11.5 of the Condition provides that, subject to paragraph 11.3, a Communications Provider shall not keep in use after 31 December 2003 any part of its Total Metering and Billing System for which an application for Approval has not been made or Approval has not been granted.
- F3 This Direction replicates the technical standard that was previously incorporated in the OfTel Metering and Billing Standard, OTR 003:2001, but contains minor changes which are necessary to reflect the language of the new regulatory framework. As such, the Condition provides that where a Communications Provider has either applied for or obtained approval for any part of its Total Metering and Billing System as conforming to OTR 003: 2001 such application or prior approval shall be deemed to be (as the case may be) an application for Approval or an Approval of the Communications Provider's Total Metering and Billing System.
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The Oftel Metering and Billing Direction

The Oftel Metering and Billing Direction a proposal for the giving of which was given in a Notification issued on 7 April 2003 and hereby made by the Director pursuant to General Condition 11 of the General Conditions of Entitlement, which were set by way of publication of a Notification on 22 July 2003.

David Albert Edmonds
Director General of Telecommunications

22 July 2003

1. Scope

1.1 This Direction applies to any Total Metering and Billing System run by a Communications Provider or Communications Providers to record access to and usage of, and charge accordingly for, Electronic Communications Services.

1.2 This Direction applies to the cumulative performance of a Total Metering and Billing System concerned in the billing of a Chargeable Event, whether in being at the date of issue of this Direction or subsequently.

1.3 This Direction applies to any Total Metering and Billing System used for both retail and wholesale purposes. It does not apply to charging and billing raised by one Communications Provider against another for handling telecommunications traffic passed between their systems (i.e. interconnection and settlement charges between Communications Providers).

Note: This Direction, however, does apply to Logging/Metering of such traffic; see clause 7.

2 Definitions and Interpretation

2.1 Definitions

In this Direction, except in so far as the context otherwise requires:

2.1.1 "Act" means the Communications Act 2003;

2.1.2 "Approval Body" shall have the same meaning as in the Condition;

2.1.3 "Bill" means either:

(a) the documentation Issued by a Communications Provider to an End-user informing him of the charges levied; or

(b) the information retained by a Communication Provider recording and allowing debits to be made from an End-user's account;

Note: Prepay services are typical examples of (b).

2.1.4 "Chargeable Event" means either:

(a) an implementation of a request for a service, feature or discount that attracts a recurring or non-recurring charge; or

(b) a use of such a service that attracts an individual charge for each use;

Note 1: The term Service Usage (see clause **2.1.16**) corresponds to (b). A typical example of Service Usage charged for by duration is a telephone call. Another example is the transmission of data, which could be charged for by counting the number of bytes or data packets required.

Note 2: Chargeable Events may occur without having been initiated by the user. An example would be charges for the terminating leg of a call. Where charges apply to both the origination and termination of the same call, two distinct Chargeable Events will have occurred. Examples are call diversion or mobile telephone roaming.

2.1.5 "Communications Provider" shall have the same meaning as in the Condition;

2.1.6 "Complaint" means an expression of dissatisfaction with the Communications Provider or the service it provides, received from an End-user;

2.1.7 "Condition" means General Condition 11 of the General Conditions of Entitlement;

2.1.8 "Director" means the Director-General of Telecommunications as appointed under section 1 of the Telecommunications Act 1984;

2.1.9 "Equipment" means all the hardware and software and/or firmware necessary for the correct operation of a function;

2.1.10 "General Conditions of Entitlement" means the conditions set out in the Schedule to the Notification published by the Director on 22 July 2003 pursuant to Section 48(1) of the Act;

2.1.11 "Issue" means the action whereby the Communications Provider, having completed preparation of a Bill, passes it to the delivery agent;

Note: The Communications Provider has completed preparation of the Bill if any further processing still to be performed by the delivery agent is for presentational purposes only.

2.1.12 "Logging/Metering" means the operation of any Equipment constructed or adapted for use in ascertaining the extent of Service Usage of an Electronic Communications Service;

2.1.13 "Overcharged Event" means either:

- (a) a Chargeable Event for which the charge to the End-user exceeds that calculated on the basis of the applicable Published Tariffs, or Previously Agreed Tariffs; or
- (b) any other incident which results in a charge being logged or added erroneously to the Bill;

Note: An example of (b) is multiple entries relating to the same Service Usage.

2.1.14 "Previously Agreed Tariff" means a written agreement between a Communications Provider and an End-user stating charges for Electronic Communication Services that is not made public;

2.1.15 "Published Tariff" means publicly available statements that specify the charges which a Communications Provider makes for Electronic Communications Services;

Note: The term is intended to cover paper documents made available for public inspection, statements published in The London Gazette or other periodicals, advertisements, information published on the Internet, and the like.

2.1.16 "Service Usage" means the extent of the End-user's use of the service provided when successfully accessed;

2.1.17 "Service Usage Specification" means the detailed description of the basis on which an End-user's use of a Communication Provider's electronic communications facilities is assessed for charging purposes;

2.1.18 "Total Metering and Billing System" shall have the same meaning as in the Condition;

2.1.19 "Undercharged Event" means a Chargeable Event, either :

- (a) for which the charge to the End-user is lower than that calculated on the basis of Published Tariffs, or Previously Agreed Tariffs; or
- (b) which has been omitted from the logged record or Bill owing to an incident;

and which is not covered by a Service Usage Specification claim.

Note: An example of (b) is the loss of call records as a result of a switch restart.

2.2 Interpretation

For the purpose of interpreting this Direction:

- (a) except in so far as the context otherwise requires, words or expressions used shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act;
 - (b) the Interpretation Act 1978 shall apply as if this Direction were an Act of Parliament;
 - (c) headings and titles shall be disregarded;
 - (d) expressions cognate with those in this Direction shall be construed accordingly.
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3 Measurement of Accuracy and Reliability

3.1 All charges must be consistent with the Published Tariff or Previously Agreed 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 all of the following limits that apply to it:

(a) where the charge is dependent upon duration, the recorded duration shall be measured to within:

- (i) between +500 milliseconds and –1,000 milliseconds; 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%).

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 or Previously Agreed Tariffs then correction should take place to ensure accurate Bills (see clause **11.2**).

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

(a) the numbers of items of Service Usage that are Overcharged Events or Undercharged Events shall not exceed as a proportion of the total number of Chargeable Events the limits shown in the column marked "Logging / Metering" in Table 1; and

(b) the sum of the values of the errors in the Overcharged Events or Undercharged Events shall not exceed as a proportion of the total value of the total number of Chargeable Events the limits shown in the Column marked "Billing" in Table 1.

Note: Measurement results can be presented as a ratio or percentage.

Table 1 – Total Metering and Billing System reliability performance requirements

Chargeable Events	① Logging / Metering	② End to End	③ Billing
Number under or not charged	0.01% (1:10K)	0.1% (1:1K)	0.09% ^a (1:1.1K)
Number overcharged	0.002% (1:50K)	0.004% (1:25K)	0.002% (1:50K)
Value under or not charged	Not Applicable	0.05% (1:2K)	0.05% (1:2K)
Value overcharged	Not Applicable	0.002% ^b (1:50K)	0.002% ^b (1:50K)
<p>^a. Determined from end to end and logging requirements.</p> <p>^b. This requirement shall be deemed to have been met if the value overcharged does not exceed £500 per calendar month.</p>			

3.4 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 or Previously Agreed 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 3.3.

3.5 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.

Note: Examples include such events as wrong numbers.

3.6 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.

Note: Such degradation may result in the repetition of voice or data messages.

4 Individual Bill accuracy

- 4.1** The Communications Provider shall employ safeguards to prevent gross errors being included in individual End-users' Bills.
 - 4.2** The Communications Provider shall have a documented process for identifying, investigating and dealing with billing Complaints and creating appropriate records thereof.
 - 4.3** The Communications Provider shall carry out a root cause analysis for each upheld billing Complaint, categorise the cause and establish proportionate remedial action to correct it.
 - 4.4** Where the root cause affects multiple End-user accounts, then all affected Bills shall, if practicable, be included in a recovery programme.
 - 4.5** Where remedial action has not been completed and the cause is likely to affect other Bills when Issued, then the Communications Provider shall take reasonable steps to ensure that they are checked and, if necessary, corrected, before being sent to the End-user. If not checked and corrected such Bills shall be included in a recovery programme (clause **4.4**).
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5 Timeliness of Post Pay Billing

5.1 The timeliness of Bill Issue or Bill data file Issue shall be subject to systematic processes.

5.2 Unless Published Tariffs or Previously Agreed Tariffs contain alternative provisions, any Chargeable Event the details of which are not to hand when the Bill is prepared shall be included in a Bill no later than:

- (a) the next Bill, when Bills are rendered quarterly or less frequently;
or
- (b) where Bills are rendered monthly, the fourth monthly Bill after the Chargeable Events occurred.

Any details not so presented shall, unless permission to do otherwise is obtained from the End-user, be written off, and if significant counted against the performance for Undercharged Events in clause **3.3**. Exceptionally, Chargeable Event details from a separate Communications Provider (see clause **7**) may be billed by the receiving Communications Provider up to three months after receipt.

5.3 Agreement to extend the time scales described in clause **5.2** may be sought from the Director via the Approval Body. An extension will only be available on an irregular basis. Decisions will be made on application for an extension concerning:

- (a) how End-users 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.

Note: All such decisions made by the Director will be published on the Oftel web-site.

5.4 The Communications 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.

Note: For avoidance of doubt, the Communications Provider does not need to establish when the Bill is actually delivered, only that it has Issued the Bill with sufficient time for the delivery agent to deliver the Bill on time. It is reasonable to assume that the delivery agent performs to the level described in its agreement with the Communications Provider or in its public statements.

6 Tariffs

- 6.1** Where more than one document has been placed in the public domain to constitute Published Tariffs, and conflicts in the information so published exist between them, the Communications Provider shall:
- (a) confirm which document takes precedence for the purposes of this Direction; and
 - (b) make such confirmation public so that it is visible to the End-user.
- 6.2** Tariffs shall include statements to define the resolution and rounding of charges, including the underlying units of measurement. This applies to both aggregated and individual charges.
- 6.3** Where the fee varies according to a choice made by the End-user, then such variations should appear in the Published Tariffs.
- 6.4** If a Previously Agreed Tariff statement is made visible to the general public, it is to be regarded as a Published Tariff.
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7 Interworking between Communications Providers

- 7.1** Where a Total Metering and Billing System is operated by more than one Communications Provider, each Communications Provider shall be responsible for the timeliness and accuracy of output produced by its Equipment, procedures, and data.
- 7.2** No Communications Provider shall be responsible for the accuracy of output produced by another Communications Provider's Equipment, procedures, and data.
- 7.3** If there is evidence that signals or data handed over to a receiving Communications Provider contain errors, then such errors, if uncorrected, shall be counted by the receiving Communications Provider in determining compliance with this Direction. The correction of errors shall be subject to systematic processes.

Note: An example of signalling error is a premature answer signal being transmitted.

7.4 Application of Table 1

7.4.1 Where:

(a) the Total Metering and Billing System is operated by more than one Communications Provider; and

(b) the activities of each Communications Provider do not fall within the scope of Table 1, Columns 1 or 3;

then the limits in Table 1 Column 2 shall be apportioned equitably to each Communications Provider according to the scope of its activity.

7.4.2 After agreement with (and between) the relevant Approval Body (or Approval Bodies) such apportionment shall be made contractually binding between the Communications Providers.

7.4.3 Limits shall not be applied which would require any Communications Provider to operate its part of the Total Metering and Billing System free from any error.

8 Quality

8.1 A Communications Provider operating a Total Metering and Billing System shall have and enforce the effective use of procedures and documentation covering all aspects of Total Metering and Billing System operation for which it is responsible.

Note: This shall include sub-contractors' formal procedures and documentation.

8.2 Where accuracy of Logging/Metering and/or billing may be affected by the performance of Equipment operated and/or maintained by a sub-contractor, the Communications Provider shall contractually commit the sub-contractor to operate and/or maintain the Equipment so as to maintain compliance with this Direction.

9 Materiality

9.1 Compliance with the requirements contained in this Direction shall need to be demonstrated only in relation to products and services that have a material impact on the End-user's Bill. This materiality is deemed to be:

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

Note: Such a direction may, for example, be given in the event of a product or service raising a disproportionate level of Complaints.

10 Measurement Systems

10.1 The means for demonstrating conformity with the requirements of this Direction shall be subject to agreement between the Communications Provider and Approval Body. Such agreement shall take the form of a measurement strategy document.

Note: Where conformity to the performance requirements is monitored through the deployment and use of call logging/call sending equipment, it is permitted to express the requirements so monitored in terms of the results to be expected from that equipment.

11 Service Usage Specification

11.1 The Communications Provider shall produce a Service Usage Specification for each Total Metering and Billing System and agree its content with its Approval Body.

11.2 Where design features and operating processes are used to protect customers' interests and, under normal operation of the Communications Providers Total Metering and Billing System , result in one or more Undercharged Events, such undercharging shall not count against the requirements of this Direction provided the said features and processes do not under any circumstances result in Overcharged Events.

12 Conformity with this Direction

12.1 The Communications Provider will provide the Approval Body with access to all people, locations, Equipment and data necessary to establish conformity to this Direction.

12.2 In general, compliance with this Direction shall be assessed by:

- a) appraisal of the relevant Equipment, procedures and associated documentation; and
 - b) analysis of the associated data relevant to the Total Metering Billing System.
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