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| **SOUTH ASIAN TELECOMMUNICATIONS REGULATOR’S COUNCIL** **(SATRC)** |  |
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**SATRC report on meausures to protect interests of consumers of telecom services**

**Prepared by**

**SATRC Working Group on Policy, Regulation and Services**

Adopted by

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**TABLE OF CONTENTS**

**CHAPTER-I: INTRODUCTION................................................................... 4**

1. General.................................................................................................... 4
2. Domains of Consumer protection regulations……………………… 5
3. Overview of the report............................................................................ 6

**CHAPTER-II: COMPLAINT REDRESSAL............................................... 8**

1. Overview................................................................................................. 8
2. Analysis of responses from SATRC countries........................................ 9
3. International practices............................................................................. 17

United Kingdom.................................................................................... 17

Malaysia.................................................................................................. 19

Australia................................................................................................. 21

1. Recommendations.................................................................................. 23

**CHAPTER-III: QUALITY OF SERVICE.................................................... 27**

1. Overview................................................................................................. 27
2. Analysis of responses from SATRC countries........................................ 28
3. International practices.............................................................................. 36

United Kingdom..................................................................................... 36

Singapore................................................................................................. 38

Malaysia.................................................................................................. 39

1. Recommendations.................................................................................... 41

**CHAPTER-IV: BILLING ACCURACY....................................................... 46**

1. Overview.................................................................................................. 46
2. Analysis of responses from SATRC countries......................................... 46
3. International practices............................................................................... 48

United Kingdom...................................................................................... 48

Australia................................................................................................... 51

Hong Kong............................................................................................... 54

1. Recommendations..................................................................................... 58

**CHAPTER-V: MOBILE NUMBER PORTABILITY................................... 63**

1. Overview................................................................................................... 63
2. Analysis of responses from SATRC countries.......................................... 64
3. International practices............................................................................... 68

Malaysia................................................................................................... 68

United States............................................................................................ 70

Hong Kong.............................................................................................. 72

1. Recommendations.................................................................................... 75

**CHAPTER-VI: CURBING UNSOLICITED COMMERCIAL CALLS.... 79**

1. Overview.................................................................................................. 79
2. Analysis of responses from SATRC countries......................................... 80
3. International practices.............................................................................. 83

United States........................................................................................... 83

Australia.................................................................................................. 84

United Kingdom..................................................................................... 86

1. Recommendations.................................................................................... 88

**CONCLUSION**....................................................................................... 92

**ANNEXURE - 1**...................................................................................... 93

**CHAPTER-I: INTRODUCTION**

1. **General**

The world today is witnessing rapid development and change in communication technology. Various innovations have enabled communication and human interaction to be faster, more rapid and able to transcend the limits of time and space. On this basis, the communication technology has now become a basic necessity in managing daily activities of individuals. Orderly growth of the telecom sector is a priority for all nations, since telecom growth can stimulate economic growth in the country.

The telecom regulator is a statutory body in a country that strives to set in place a robust, fair and transparent regulatory regime to ensure and promote orderly growth of the telecom sector. It should be its endeavor to provide an environment, which is fair and transparent, encourages competition, promotes a level-playing field for all service providers, protects the interest of consumers and enables technological benefits to one and all. Integral to the objectives of the telecom regulator is to have measures in place to ensure that telecom service providers deliver quality services to the consumer at reasonable prices and assure greater choice and availability of services to consumers.

A telecom regulator’s principal duty is to further the interests of citizens and consumers through a regulatory regime which, where appropriate, encourages competition. The competitive nature of the telecommunications markets means that Service Providers (SPs) are likely to be receptive to the needs of their consumers and have strong commercial pressures to ensure that consumers are satisfied with the service they receive. However, competition alone may not always deliver appropriate results and consumers may need protection from inappropriate and unacceptable behavior by certain market players that may undermine confidence of the consumers in the market as well as cause individual detriment.

Consumers are vital stakeholders in the telecom industry. Therefore, effective consumer protection in the telecommunications sector is a key element to avoid additional impediments to sector growth and to unleash the full potential of telecommunications infrastructure and services as a tool of economic growth and development.

1. **Domains of Consumer protection regulations**

Ideal regulations should define legitimate consumer rights and interests, which include but are not limited to following domains:

* ***Complaint redressal:*** Complaints handling procedures that specifically encourage consumers to first seek redress with service providers can be successful and increase service providers’ awareness of consumer needs, rights and responsibilities. The consumers not only have the right to complain, but more importantly, have the right to seek a remedy whenever their rights have been infringed.
* ***Empowering consumers:*** Proactive behaviour of telecom regulator in promoting, informing, encouraging and raising awareness of stakeholders about various telecom related issues leads to consumer empowerment. It is important to recognize the need to protect and educate consumers with different access needs who may be particularly vulnerable to deceptive commercial practices or have difficulties in fully understanding the terms and conditions of service (e.g., the illiterate, the disabled, children and youth). In addition, a bottom-up approach targeted at citizens through the involvement of schools, community centers and NGOs, notably through social media, greatly contributes to raising consumer awareness. Stakeholders groups can also be created including consumer representatives, as a platform that allows for consumer participation in decision making and policy development. This will bring consumers voices to the table in a framework of ongoing dialogue.

Protection of consumer interest is a critical element in all the decisions taken by the telecom regulator. To ensure proper consumer participation, a telecom regulator usually offers all consumers a say in all its consultations for regulations and policy making. This process may involve publishing of all documents and information on the web-site of the telecom regulator; all Open House Discussions (OHDs) being open for public participation and recommendations taking consumer interests into consideration.

* ***The consumer’s right to information:*** Regulators need to ensure that all service providers make available timely and accurate information about their services and products in a clear, transparent and comparable manner that is conducive to rational decision making. Consumers should thus be able to understand the nature of the services, including prices and how they are calculated, and the quality of service provided, in addition to their own rights and responsibilities. All regulations related to consumers’ right to information should be regularly and consistently updated allowing it to be practical and enforceable.
* ***Ability to switch service provider:*** The ability and willingness of consumers to switch from one service provider to another is of critical importance. It is by switching that consumers punish poor performance. The ability of consumers to switch between service providers easily and at low cost, encourages providers to cater to customer requirements or risk losing them to the competition. High search and switching costs deter consumers from switching. Number portability lowers the cost of switching by allowing telephone users to keep their number when changing telephone service providers.

1. **Overview of the report**

There are a plethora of domains in which regulations can be issued by a telecom regulator for customer-centric issues. To have in-depth analysis of the imperative regulations required for consumer protection, we have limited our study to the following five major areas:

1. Complaint redressal
2. Quality of Service
3. Billing Accuracy
4. Mobile Number Portability (MNP)
5. Curbing Unwanted Commercial Communications (UCC)

In order to carry out the study, a questionnaire was prepared and circulated to all expert members of the SATRC countries for their inputs. The questionnaire is placed as Annexure-I to this report. An analysis of various regulations and provisions in the above mentioned areas has been carried based on the inputs received from the experts of the following SATRC countries:

1. Afghanistan
2. Bangladesh
3. Bhutan
4. India
5. Iran
6. Maldives
7. Nepal
8. Pakistan
9. Sri Lanka

The objective of this report is to study the consumer protection mechanisms already in place in the SATRC region and to assess the gaps as well as to study the internationally prevalent consumer protection measures being laid by the telecom regulators across the globe. After studying them, certain suggestions are proposed, which can be adopted by the SATRC countries to have a well defined, systematic and effective consumer protection system to safeguard the interests of the consumers in the telecom sector in their countries.

**CHAPTER-II: COMPLAINT REDRESSAL**

1. **Overview**

A regulator takes several measures to protect the interest of consumers, to facilitate availability of telecom services at affordable price and to ensure Quality of Service is provided by telecom service providers. Notwithstanding this, consumers continue to have concerns and issues with regard to the telecom services received by them. Consumer complaints play a valuable role in helping regulators to identify those areas where current legislation/regulation may be lacking and where best to target interventions. Given the large base of telecom consumers in any country, the number of complaints would be large even if the percentage of dissatisfied consumers is low.

The customer service and customer relationship management is an important way in which the Service Providers can distinguish themselves and compete for customers. However, it is the responsibility of the regulator to make sure that when consumers are dissatisfied, they are able to make a complaint with ease and can be assured that their service provider will have processes in place to receive and handle their complaint.

Effective complaint handling procedures are an important aspect of ensuring that individual citizens and consumers are appropriately protected and empowered in their dealings with the Service Provider. If a complaint is handled badly, an individual consumer may suffer emotional and financial harm beyond what may have been caused by the initial problem that prompted the complaint. Effective redressal of consumer complaints is therefore of prime importance. The effort in this regard is a continuous process and requires to be reviewed from time to time to improve the effectiveness of complaint redressal. There should be a framework for satisfactory redressal of consumer grievances through establishment of an effective multi-tier redressal mechanism. While considering regulatory intervention in this area, care should be taken to balance the importance of regulation for consumer protection against the detrimental impact that regulation may have on efficient, effective and innovative customer service – which benefits all consumers.

Access to a fair and transparent complaint process is an essential part of an effective consumer protection framework. The complaint redressal mechanism can be successful if there is high awareness among the consumers about the said mechanism along with the information relating to where and how to lodge grievances, the officials of the service providers to be approached for redressal of grievance and the time period by which the grievance will be effectively resolved.

1. **Analysis of responses from SATRC countries**

In countries like India, Pakistan, Bhutan, Bangladesh and Afghanistan, there are Telecom Consumers Complaint Redressal Regulations, in place, which deal with the framework for handling of consumer complaints, service request and provision of information to consumers by service providers. In Maldives, according to Telecommunications Regulations 2003, a licensee must adequately address customer complaints. The Authority may by license condition or direction require a licensee to prepare a customer charter which sets out procedures for the handling of customer complaints and dispute. In Iran, there are no such regulations in place, but there are departments for consumers complaints and also a call center for registering consumer complaints and following them.

***Establishment of Complaint Centre***

In most SATRC countries like India, Pakistan, Maldives, Bhutan, Nepal, Sri Lanka, Bangladesh, and Afghanistan, TSPs have their Complaint Centre which operates on all days of the week. In Iran, the Complaint Centre operates on working days only. These complaint centers can be accessed through a ‘Consumer Care Number’, which is toll free except in Bangladesh and Sri Lanka, where it is not toll free. In all these countries, except in Sri Lanka and Nepal, in case consumer’s telephone/ mobile is faulty, the consumer can use a connection from any other service provider to contact the Complaint Centre. The consumer may opt to speak in English or in the local language.

***Handling of complaints at the Complaint Centre***

In Afghanistan and Iran, there are no specified time limits for resolution of complaints. The time limits for resolution of different types of complaints for various SATRC countries are mentioned in the tables below:

1. Basic Telephone Service (wireline):

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **QoS Parameter** | **India** | **Pakistan** | **Maldives** | **Bhutan** | **Nepal** | **Bangladesh** |
| 1 | **Provision of Telephone** | 100% in ≤ 7 days (subject to technical feasibility) | Within 7 days | 7 working days | 100 % cases in less than 7 days, provided technically feasible | Depending upon the availability of point, it normally takes one week | Within 20-30 days |
| 2 | **Fault Repair** | **For urban areas:** By next working day: ≥ 85% and within five days: 100%.  **For rural and hilly areas:** By next working day: ≥ 75% and within 7 days: 100%. | Termed as Fault clearance ratio:-  Within 24hr: 95%  Within 48hrs: 100% | 48 Hrs | 90 % within next working day and 100 % within 3 days | Within 36 working hours | **Maximum of 7 days**  **for rural and for hilly areas a** Maximum 15 days |
| 3 | **Shift of Telephone Connection** | ≤ 3 days (95% of requests to be attended within 3 days) | Within 7 working days. | 7 working days | Within 24 hours after receive of application | Depending upon the availability of point, it normally takes two days | Maximum 7 days |
| 4 | **Termination/ Closure of service** | ≤ 7 days | Within 7 working days. |  | Within 1 hour after receive of application | Within one working day | Within 7 days |
| 5 | **Resolution of billing/ charging complaints** | ≥ 98% within four weeks and 100% within six weeks | 90%: 24hrs  95%: 48hrs,  99%: 72 hrs,  100% within 7 days | 10days | Within 24 hours | Normally within one working day | - |
| 6 | **Period of applying credit/waiver/adjustment** | within 1 week of resolution of complaint | Within 1 week |  | Three months | Normally within one month of billing cycle | Within one week of resolution of the complaint |
| 7 | **Time taken for refund of deposits after closure** | 100% within 60 days | Within one month of billing cycle/or next billing cycle. | Within 45 days | 24 hours | Normally within one month of billing cycle | Maximum 7-10 days. |

1. Cellular Mobile Telephone Service:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Service Parameter** | **India** | **Pakistan** | **Maldives** | **Bhutan** | **Nepal** | **Bangladesh** |
| 1 | **Resolution of billing/ charging complaints** | ≥ 98% within four weeks and 100% within six weeks | 98% in 24hrs  100% in 48 hrs | 10 days | 24 hours | Normally within a day | 24 Hours |
| 2 | **Period of applying credit/waiver/adjustment to customer‘s account from the date of resolution of complaints** | within 1 week of resolution of complaint | Within one month of billing cycle/or next billing cycle | Next bill run | 24 hours | Normally within couple of days | Within one week of resolution of the complaint |
| 3 | **Termination/ Closure of service** | ≤ 7 days | Within 24hrs |  | 1 hour | Normally within two days | Within 7 days |
| 4 | **Time taken for refund of deposits after closure** | 100% within 60 days | Within one month of billing cycle/or next billing cycle. | 45 days | 24 hours | Normally within a week | Maximum 7-10 days. |

1. Broadband Service:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Service Parameter** | **India** | **Pakistan** | **Maldives** | **Bhutan** | **Nepal** | **Bangladesh** |
| 1 | **Service Provisioning /Activation Time** | 100% cases in ≤15 working days (subject to technical feasibility). | Within 7 days | 7 days | 1 Hour | Normally within a week | Less than 7 days (subject to technical feasibility) |
| 2 | **Fault Repair / Restoration Time** | By next working day: > 90% and within 3 working days: 99% | Termed as Fault clearance ratio:-  Within 24hr: 95%  Within 48hrs: 100% | 48 Hrs | 24 hours | Normally within two working days | within 3 days |
| 3 | **Billing Performance**  **(a) Percentage of Billing Complaints resolved.**  **(b) Time taken for refund of deposits after closure** | 1. 100% within 4 weeks 2. 100% within 60 days | 90%: 24hrs  95%: 48hrs,  99%: 72 hrs,  100% within 7 days  Within one month of billing cycle/or next billing cycle | Time Limit for redressal of complaint: 10 days | 1. 90 % within 48 hours 2. 1 hour | 1. almost 99% 2. normally within three working days | Resolution of billing complaints : within 2 weeks |

In all SATRC countries, except Bhutan and Bangladesh, the Complaint Centre communicates the unique docket number along with date and time of registration and the time limit for resolution of the complaint. In Bangladesh, the Complaint Centre communicates only the unique docket number while registering the complaint and does not provide the time of resolution of complaint. In India, Pakistan, Maldives and Nepal, on completion of action on a complaint, the consumer is informed of the action taken. In Nepal and Afghanistan, time for which the details of the complaint remain in the system, against each docket number, depends on the live time of complaint. In Pakistan, this time period may be between 6 months upto a year, depending on severity of the complaint. Whereas in Bangladesh, Bhutan, India and Maldives, it is fixed at three months, one week, three months and six months respectively.

***Handling of queries***

In all SATRC countries a “General Information Number” is established by all the service providers if in case a consumer needs certain information from the service provider.

***Operation of IVRS on Customer Care Number***

In India, the Interactive Voice Response System (IVRS) at the “Consumer Care Number” should operate in the following manner:

1. the first level of the IVRS provides for language selection;
2. the second level of the IVRS provides for options relating to the broad categories of complaints and service requests;
3. the third level of the IVRS provides for a sub-menu under complaints and service requests, with the option to speak to a consumer care agent.

In Bangladesh, the first two steps of the IVRS system are similar to those of India and at the third step, the customer speaks to the consumer care agent.

In Pakistan, also the IVRS at the “Consumer Care Number” operate in the prescribed multi step manner. These steps are: 1ST step: Language selection, 2nd step is IVR instructions/Menu, 3rd step technical assistance. Usually by 2nd Step, after language selection step, consumers can dial “0” or “1” in some case to talk to a representative.

In Bhutan, the Interactive Voice Response System (IVRS) at the “Consumer Care Number” operate in the prescribed multi step manner. 1st step: language selection option, 2nd step: Service selection 3rd step: problem selection 4th step: promotions 5th step: general information 6th step: speak to operator.

In Nepal and Iran, the Interactive Voice Response System (IVRS) at the “Consumer Care Number” normally operates in a multi step manner but not in prescribed steps.

In Afghanistan, the Interactive Voice Response System (IVRS) at the “Consumer Care Number” operate in a multi step manner i.e. 1ST step is language selection option, 2nd step is IVR instructions 3rd step promotions, 4th step technical assistance 5th step general information and so on. The steps in the IVRS system in which a consumer gets to speak to a customer care executive differs from operator to operator (2 to 5 steps).

In Maldives, the consumer gets to speak to a customer care executive in the IVRS system in 2 steps.

***Appeal to Appellate Authority***

Where a consumer is not satisfied with the redressal of his complaint by the Complaint Centre, or his complaint remains unaddressed or no intimation of redressal of the complaint is received within the period specified in regulation, such consumer may prefer an appeal to the Appellate Authority for redressal of his complaint in India, Iran and Bhutan. In Nepal, a consumer can approach NTA for the redressal of complaint, and further, the Appellate Authority can be approached if he is not satisfied with NTA's decision.

In Pakistan, Maldives, Bangladesh and Afghanistan and Sri Lanka, there is no separate Appellate Authority except the telecom regulator, which can be approached by a consumer for the redressal of complaint, if he is not satisfied with the actions of the service provider.

In SATRC countries where a separate Appellate Authority is present, the following observations are made:

* The contact details of the Appellate Authority are available on the web site of the service providers and their sales outlets. In India, these are also available in the start-up kit.
* There is no fee or charge for filing an appeal except in Nepal, where a fee is charged but the amount of fee for filing an appeal is not fixed as it is calculated based on the case and penalty.
* Different means through which the appeal can be filed is as mentioned in the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Means of filing appeal | India | Bhutan | Nepal | Iran |
| E-mail | ✓ | ✓ | 🗶 | ✓ |
| Fax | ✓ | ✓ | 🗶 | 🗶 |
| Post | ✓ | ✓ | 🗶 | ✓ |
| In person | ✓ | ✓ | ✓ | ✓ |
| Customer care number | ✓ | - | - | ✓ |

* In India and Iran, the consumer may file the appeal to the Appellate Authority within thirty days after expiry of time limit prescribed for redressal of complaint. In Nepal, appeal can be filed within 35 days of the decision made for a case. In Bhutan, there is no such prescribed time limit.
* In the countries mentioned in paragraph above, an appellant can appear in person to present his case before the Appellate Authority.
* In India, there is also an Advisory Committee to the Appellate authority of the service provider in every service area. It has two representatives – one from the service provider and the other from the registered Consumer Advocacy Group (CAG) registered with TRAI. The Advisory Committee has to give its advice on every appeal to the Appellate Authority for its consideration. In Iran, whether the Advisory Committee will be present or not, depends on the operator.
* In India, the secretariat of the Appellate Authority has to register an appeal immediately on receipt by assigning a unique appeal number. In Nepal, the case number gets registered in their filing system and website. In Bhutan, no such unique appeal number is assigned.In Iran, some operators have this number.
* In Bhutan, the consumer is informed formally through official letter about the acknowledgement of the appeal. In India, the secretariat of the Appellate Authority has to acknowledge the appeal, within three days of its receipt, by sending the unique appeal number through SMS or e-mail to the consumer. In Nepal and Iran, no such communication of acknowledgement is given to the consumer.
* A copy of the appeal is forwarded to the service provider concerned for filing a reply. In Nepal, the service provider can file a reply within 35 days, in India this time limit is 7 days and in Bhutan, there is no such time limit.
* In India, the secretariat of the Appellate Authority has to place before the Advisory Committee for its consideration the reply of the service provider along with the appeal, within two days of receipt of reply from the service provider. The Advisory Committee has to render its advice on every appeal placed before it within fifteen days. The secretariat has to place the advice of the Advisory Committee before the Appellate Authority, within two days of receipt from the Committee.
* In India and Bhutan, the secretariat of the Appellate Authority has to intimate the decision on the appeal to the appellant and the service provider whereas in Nepal it is the responsibility of Under Secretary in Ministry of Information and Communication.

***Web based Complaint Monitoring System***

In India and Bangladesh, the telecom consumers complaint redressal regulations require setting up of a Web based complaint monitoring system by the service provider through which the consumers can track their complaints.

In India, TRAI has launched the Telecom Consumers Complaint Monitoring System (TCCMS) portal www.tccms.gov.in to facilitate the telecom consumers–

* in locating the “Consumer Care Number”, “General Information Number” and contact details of the complaint centre and Appellate Authority of their service provider.
* in accessing the website of their service provider’s complaint monitoring portal to track the current status of their complaints or appeals lodged with their service provider complaint centre or Appellate Authority.

In Iran, there is a web based complaint center that is managed by the regulator. There is also a short code for filing a complaint.

In Nepal, Telecom Consumers Complaint Monitoring is done manually to help the customer in processing their complaints.

***Telecom Consumers Charter***

In India, the service providers are required to publish a Telecom Consumers Charter in Hindi, English and the local language of the service area. It must have the following information:

1. terms and conditions of service
2. Information about complaint redressal mechanism, complaint redressal procedure
3. Different time frames specified by the authority for various complaints under QoS regulations
4. QoS parameters specified by the authority in respect of each of the service
5. Quality of service promised by the service providers
6. Consumer care number
7. General information number
8. procedure for termination or disconnection of each service offered by the service provider
9. Right of the consumers under different regulations, orders issued by the Authority
10. Duties and obligations of service providers under different regulations, orders and directions issued by the Authority

In India, the Start-up Kit, which a mobile customer gets at the time of his enrolment, contains an abridged version of the Telecom Consumers Charter.

In Pakistan, there is no Telecom consumers charter, however, Standard Contract of Service (SCS) and code of commercial practice (CCP) exists, which covers majority of above points. Each operator is required to approve their SCS and CCP within 1 year of issuance of their licenses. Also, the Start-up Kit contains the salient feature of telecom regulations.

In Maldives, Bhutan, Sri Lanka, Bangladesh and Afghanistan, service providers are not required to publish a specific Telecom Consumers Charter. In Iran, publishing telecom charter is under the control of operator.

***Publication of information in Newspapers and website***

In most SATRC countries like India, Pakistan, Bhutan, Bangladesh, Nepal, Sri Lanka and Afghanistan, the service providers publish the following information on their web site:

1. Customer Care Number
2. General Information Number

In Iran these information is published in local language and it is optional for the service provider to make the same information available on the website. Besides, these, in India and Bangladesh, the service providers publish the procedure for monitoring of complaints on the web based complaint monitoring system. In addition to this, in India, the contact details of the Appellate Authority are also published.

The service providers are required to publish this information, in both English and local language in leading newspapers with varying frequencies in different countries, as mentioned in the table below:

**Country wise frequency of publishing this information**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Country** | **Frequency** |
|  | India | Once in every six months |
|  | Pakistan | At beginning of operation or launching services and routine updating |
|  | Bhutan | There is no requirement by rules |
|  | Bangladesh | No fixed time period |
|  | Nepal | As and when required |
|  | Afghanistan | At the beginning of operation or launching services |
|  | Sri Lanka | - |

There is no publication of such information in newspapers and website, by the service providers, in Maldives.

1. **International Practices**

***United Kingdom***

[[1]](#footnote-1)Section 52 of the Communications Act 2003 places a duty on Ofcom to set general conditions to ensure that communications providers establish and maintain procedures to, amongst other things, handle complaints and resolve disputes between them and their domestic and small business customers. General Condition 14 (GC14) is the relevant condition for complaint handling and dispute resolution. Under GC14.4 communications providers must have and comply with procedures that conform to the Ofcom Approved Code of Practice for Complaints Handling when handling complaints made by domestic and small business customers. Under General Condition 14.5 providers are obliged to implement and comply with a dispute resolution scheme ('ADR'). There are penalties for non-compliance with General Condition 14. Under Section 96 of the Act, Ofcom may impose a penalty of up to ten per cent of turnover for failure to comply with a formal notification within the time period specified.

[[2]](#footnote-2)The Ofcom Approved Code of Practice for Complaints Handling (the ‘Ofcom Code’) sets out the minimum standards that Ofcom has set for Communications Providers (CPs) in the handling of Complaints made by Domestic and Small Business Customers about the provision of Public Electronic Communications Services. According to it, a CP must have complaints handling procedures that are transparent, accessible, effective, facilitate appropriate access to Alternative Dispute Resolution and retain appropriate records of contact with Complainants.

Ofcom works to ensure everyone gets the very best from their communications and their role is to look at how issues affect UK consumers as a whole. They don’t handle individual complaints.

For Problems including:

* additional charges
* charges for leaving your contract early
* call costs
* price of other services
* disputed bill items
* refunds no price list
* credit limits/allowances
* stolen mobile phone/ dongle

Consumers can follow these steps:

* Contact their provider’s customer services department and explain the problem.
* If this doesn’t resolve the issue, consumer can make a formal complaint to the company. The details of how to do this can be found on the back of the bill, on their website or from the customer services.
* If their provider is unable to resolve the complaint, consumer may ask for a deadlock letter. This enables the consumer to take the complaint to an Alternative Dispute Resolution (ADR) scheme.

ADRs act as an independent mediator and will examine the case from both sides and reach a decision they think fair. If eight weeks have passed since you first formally complained you can contact the ADR directly. There are two ADR schemes - [Ombudsman Services: Communications](http://www.ombudsman-services.org/communications.html), and the [Communications and Internet Services Adjudication Scheme (CISAS)](http://www.cisas.org.uk/). All service providers in UK must belong to one of the schemes. The service provider will tell the consumer which scheme it is a member of, or consumer can use OFCOM’s ADR checker.

***Malaysia***

The Malaysian Communications and Multimedia Commission (MCMC) although not directly involved in the handling, but has responsibility for ensuring consumer complaints are dealt with fairly and effectively. The complaints relate to all aspects of communications and multimedia services, telecommunications, broadcast, Internet services, postal and courier services, and digital certification.

[[3]](#footnote-3)In Malaysia’s Consumer Complaints Handling Process, the first stage of complaint made to the service provider enables the latter to solve issues first hand. However, should the complaint to the service provider not be resolved or dealt with in a satisfactory manner, the consumer may proceed to the relevant Industry Forum, namely Communications and Multimedia Consumer Forum of Malaysia (CFM) or Communications and Multimedia Content Forum of Malaysia (CMCF). If the complaint still cannot be resolved, then MCMC is the next platform.

**Malaysian Consumer Complaints Bureau: Complaints Handling Process**

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The CFM works on the basis of self-regulation with participation and representatives from consumer associations, service providers and other interested parties. The CFM is a designated Industry Forum in line with the requirements of the CMA. Since 2001, the CFM provides platform for resolution of complaints, disputes and grievances in relation to consumers‟ C&M matters. The year 2013 marked a milestone for CFM with the official launching of their consumerinfo.my portal (www.consumerinfo.my). This portal is part of the CFM initiatives to reach out to consumers through new media platforms. Aside from this, CFM is also promoting their awareness campaign on Facebook and Twitter.

In an effort to create greater visibility to all Malaysians, CFM has actively participated in various consumer engagement and awareness events. CFM publications such as consumer handbook and other consumer awareness collaterals were distributed during these various events to encourage empowerment of consumers with knowledge of their C&M rights.

Figure below charts the trend of types of complaint received by MCMC over the last three years.



***Australia***

[[4]](#footnote-4)The service provider must make details of its complaints-handling process available in a readily accessible position on its website. The information should be clear. If someone who does not have access to the internet, can ask for a copy of the complaints-handling process, which must be made available free of charge. Details of the service provider’s complaints-handling process must be available in appropriate different formats to ensure that it meets the needs if you consumer has a disability, is from a non-English speaking background and/or is suffering hardship. The service provider’s complaints-handling process needs to be developed with regard to the Australian Standard on Complaint Handling.

To make a complaint, the consumer should contact its service provider in the first instance. A person can complain to a service provider if he is a current or former customer. If he remains dissatisfied after dealing with its service provider, he can contact the [Telecommunications Industry Ombudsman](http://www.tio.com.au/)(TIO). The TIO is an office of last resort—to be involved once all other avenues for dispute resolution have been explored. The TIO provides independent, just, informal and speedy resolution of telephone complaints and disputes. Its service is free to consumers.

The complaint can be made by letter, over the telephone, by fax, online at a website or by email. It doesn’t have to be written. If the service provider has retail operations, the consumer can complain to a person in the store. Complaining to the service provider is free of charge except in some limited circumstances. These include:

1. if the consumer request access to information that is over two years old
2. if the free provision of the information in the form or quantities requested is inconsistent with the service provider’s standard form customer contract or the summary of offer in the [Critical Information Summary](http://www.acma.gov.au/Citizen/Consumer-info/Rights-and-safeguards/TCP-code/critical-information-summaries-for-telecommunications-consumers).

Service providers may charge for calls to complaints-handling areas at local or low cost call rates.

If complaintis made to service provider, they must acknowledge it:

1. immediately if the consumer complained in person or by telephone
2. within two working days once the complaint has been received by the service provider when it has been made by email, logged on a website, sent by mail, or received by telephone where the call was met with a recorded message.

Acknowledgement need not be in writing. The complaint must be assigned a unique reference number or some other identifier that will ensure that the service provider can easily identify your complaint and its subject matter.

Where possible the service provider should seek to resolve the complaint on first contact. If this is not possible, they need to advise the consumer about the proposed resolution of the complaint as soon as is practicable after they have completed the investigation. The service provider needs to specify the response times for individual steps in its complaints-handling process. These need to be clearly set out.

Urgent complaints—by customers in [financial hardship](http://www.acma.gov.au/theACMA/what-should-i-do-if-i-cant-pay-my-bills-on-time-acma) or receiving [priority assistance](http://www.acma.gov.au/Citizen/Consumer-info/Rights-and-safeguards/Disability-and-priority-services/priority-assistance-acma) where the complaint relates to that issue or where a disconnection has occurred or is in imminent and the processes set out in the Code for credit management have not been followed— should be resolved within two working days. Most other complaints should be resolved within 15 working days.

If the service provider does not believe a complaint can be resolved within these time frames, it must advise the consumer, before the end of the relevant time period of:

1. the reasons for the delay
2. the time frame for complaint resolution
3. options for external dispute resolution if the delay is 10 working days or more.

If the consumer is unhappy with the time frames that apply to the management of your complaint or he seeks to have your complaint treated urgently, he will need to tell the service provider. The service provider must then tell the consumer about its internal escalation processes for complaints-management and the options for external dispute resolution, including the [Telecommunications Industry Ombudsman](http://www.tio.com.au/).

The service provider must provide the consumer with the means to track the progress of the complaint. This will usually involve a unique reference number but may involve another means (e.g., with smaller service providers the name of the consumer may be a sufficient identifier).

The consumer must accept any proposed resolution to his complaint before his service provider is required to implement it. A resolution cannot be imposed if the consumer doesn’t agree with it. The consumer can ask for his complaint to be escalated and managed under his service provider’s internal escalation process if he doesn’t agree with the proposed resolution of his complaint. He can also pursue his complaint further with the Telecommunications Industry Ombudsman. His service provider must tell him how to contact the [Telecommunications Industry Ombudsman](http://www.tio.com.au/) if he indicates dissatisfaction with the project or outcome of his complaint.

The service provider is formally required to classify and analyse complaints every three months to identify recurring problems and issues that include areas of non-compliance with the [Telecommunications Consumer Protections Code C628:2012](http://www.commsalliance.com.au/Documents/all/codes/c628). They also need to monitor complaints to identify emerging issues and address these as soon as is practicable and record progress against addressing these complaints. Service providers also need to formally monitor and report annually to their Chief Executive Officer regarding their compliance with their complaints-handling processes and where there are opportunities to make improvements.

1. **Recommendations**

After analyzing the Complaint Redressal procedures followed in the SATRC countries as well as studying the Global practices being followed on the issue, the following suggestions are made which can be considered for implementation by members of SATRC in their respective countries:

1. The regulators could issue regulations specifying the complaint redressal procedure. These regulations should mandate the service providers to establish a Complaint Centre with a toll free “Consumer Care Number”, for redressing the complaints of their consumers at no cost.
2. For accessing the service provider for either booking a complaint or making a service request, consumers could be able to access the Complaint Centre through any other service provider. This is mainly required when there is disruption or disconnection of service by the parent service provider. The regulations should accordingly mandate the provision of an alternate number for the ‘Consumer Care Number’ which can be accessed from any other network.
3. In the absence of the mandatory well established format of a multi-step IVRS menu, customers face difficulty in navigating the IVRS menu at the Call Centre and are unable to speak to a customer care agent. Since a sizeable segment of subscribers are from the rural areas and the low income group, it is necessary that the IVRS menu could have an option of the subscriber being able to speak to the customer care agent in the shortest possible steps. Hence, a provision could be made in the regulations prescribing the manner in which the IVRS menu shall be managed including the provision for speaking to a customer care agent in a specific step. It is felt that the consumer should be able to speak to a customer representative in the third step of an IVR system.
4. A major obstacle in effective complaint redressal mechanism is the low awareness about the existing grievance redressal mechanism. To address this issue, the regulations could mandate that advertisement about the Complaint Centre and Appellate Authority may be published every six months in the newspaper and also such information should be given through website, telephone bills, vouchers, complaint centres, sales office and through pre-configuration or over the air transfer in the SIM. The regulations should also mandate that whenever there is a change in any policy, a similar advertisement should be made.
5. At times, the customer is not sure if his complaint has been registered and the time that is likely to be taken by the service provider for its resolution. Accordingly, it could be mandated in the regulations that every complaint shall be registered by giving a unique docket number, which could remain in the system for at least three months. The docket number along with date and time of registration and the time limit for resolution of the complaint could be communicated to the consumer. The customer shall also be informed of the action taken.
6. A ‘Web Based Complaint Monitoring System’ could be there to enable the consumers to monitor the status of their complaints. The Web based system is technically feasible also. Accordingly, the regulations should mandate the service providers to implement the web-based complaint system.
7. There could be an effective body for redressal of grievances of consumers, which should also have representatives from consumer organizations to give importance to the opinions, views and welfare of the consumers. There could be a two-tier complaint redressal system for enhanced efficiency. The Complaint Centres are essentially registration and response centres and do not themselves deal with the resolution of complaints. They only facilitate registration of consumer complaint and the level at which a problem is resolved within a company depends upon the complexity of the issue involved.
8. Therefore, if the consumer is not satisfied with the resolution of the complaints, he can approach the next tier – the Appellate Authority for redressal of his complaints. Additionally, in order to strengthen the functioning of Appellate Authority, there could be a two-member Advisory Committee comprising of one representative of consumer organisation registered with the telecom regulator and one member from the service provider, to render advice to the Appellate Authority on every appeal filed before the Appellate Authority.
9. The regulations could prescribe that every service provider shall appoint an Appellate Authority in each service area within forty-five days of commencement of these regulations. The Appellate Authority can be a one or more than one member body, at the discretion of the service provider. Every appellate authority shall have a Secretariat. The Secretariat shall register the appeal, acknowledge the appeal with a unique appeal number, and forward the appeal to the service provider for its reply. On receipt of reply from the service provider, it shall place before the Advisory Committee the appeal and reply received from the service provider, for its advice. On receipt of advice of Advisory Committee, it shall place before the Appellate Authority the appeal filed, reply received from the service provider and advice tendered by the Advisory Committee for a decision. The Appellate Authority shall take a decision on the appeal upon placing of the appeal by the Secretariat.
10. The regulations could provide for the time bound resolution of complaints at both the tiers - Complaint Centre of the Service Provider and the Appellate Authority.
11. The regulations could provide for a Citizen’s Charter. Keeping the interest of the consumer, the telecom regulator can prescribe detailed guidelines, regarding material to be published in the Citizen’s Charter. The Citizen’s Charter can provide details about General Information Number, Consumer Care Number, right of consumers under the different regulations, orders and directions issued by the telecom regulator, in particular those relating to Tariff, Mobile Number Portability, Telecom Commercial Communications Customer Preference and Value Added Services.
12. The regulator should maintain a comprehensive database of the complaints registered by the subscribers of various service providers. This trend of the data should be then analysed to figure out the most reccurring problem being faced by the customers, so that accordingly modifications could be done in the existing regulations, awareness programs and other consumer empowerment measures.

**CHAPTER-III: QUALITY OF SERVICE**

1. **Overview**

Provision of world class telecommunication infrastructure and information is the key to rapid economic and social development of the country. While expansion in number of subscribers and growth of tele-density are important quantitative goals in this sector, it is important to pay attention to the Quality of Service to consumers in telecom sector.

Competition amongst the service providers in a mature market takes care of the Quality of Service to a great extent. However, in a fast developing market the Quality of Service has more linkages with accessibility, involving robust infrastructure, appropriate capex commitment, and affordability considerations. However, the loyalty in terms of subscribers’ relationship with the access providers and perceived tolerance to bear with the quality of service, remains. Thus the key issue here remains as to how the Quality of Service is to be ensured and what relief should be given to customers for poor Quality of Service. To achieve these two objectives, the regulator can establish provisions relating to regulatory enforcement.

In the telecom sector, particularly in cellular mobile telephone service, there has been phenomenal growth. Technology changes have taken place with passage of time in providing cellular mobile services. Now, Broadband services are redefining the telecom sector by enabling the emergence of new industries while unlocking vast new possibilities for existing ones. Broadband is changing how we educate children, deliver health care, manage energy, evolve public safety, implement government policies and subsidies, organize and disseminate knowledge. The Quality of Service is required to be reviewed periodically to update the Quality of Service parameters and benchmark for basic, cellular and broadband services.

Customer satisfaction is the major determining factor in the emergence of new services, setting standards and designing of network. Therefore, the customer requirements and expectations are paramount considerations in reviewing Quality of service standards.

Ensuring the quality of service is very important for customer satisfaction and protection of consumer interest. In selecting benchmark of quality of service, the parameter and benchmark should be meaningful to the consumer for enabling him to make an informed choice and also on the level of quality that they are getting. The measures that are objective, measurable and verifiable are important to ascertain the quality of service being maintained by the service provider. In a competitive scenario, the need for service providers to provide good service to attract and retain the customer should serve as an incentive to maintain high quality of service. Also for the effective competition in the market as well as for the promotion of consumer awareness and protection of consumer interest, access to accurate and meaningful information about service quality can have an effect on consumer choice.

There is a need to define each Quality of Service parameter extensively and also to explain the measurement methodology for each parameter so that uniform practice is adopted by all the service providers for measuring, recording and auditing of such performance parameters.

In achieving the quality of service, service providers have to continuously plan, upgrade, augment capacity and ensure customer care provisioning. This process involves:

* a network design and expansion as per the projected traffic/consumer base
* reliability of various network elements
* continuous monitoring of network and augmentation/optimization
* service repair and service level management of all existing and new customers and ensure that with enrolment of new customers, existing customer do not face deterioration in the quality of service

1. **Analysis of responses from SATRC countries**

All the SATRC countries have laid down the standards of Quality of Service to be provided by the service providers, for:

1. Basic and Cellular Mobile Telephone Services
2. Broadband services

The Quality of Service standards have been either established in specific regulations or are contained in the licensing terms and conditions, in different SATRC countries.

All SATRC countries, except Bhutan, have specified parameters on quality of service related to network outages benchmarks for meeting these parameters by the service providers in respective countries are mentioned in the table below:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **QoS Parameters** | **India** | **Nepal** | **Afghanistan** | **Maldives** | **Bangladesh** | **Iran** | **Sri Lanka** |
| 1. | BTS accumulated downtime | ≤ 2% | Value not provided in response | 72 hours per year | Value not provided in response | ≤ 2% | Value not provided in response | ≤ 2% |
| 2. | Call set-up success rate | ≥ 95% | ” | 98 % | do | ≥ 95% | do | > 95% |
| 3. | SDCCH/ Paging Chl. Congestion | ≤ 1% | ” | 0.5% | do | ≤ 3% | do | - |
| 4. | TCH Congestion | ≤ 2% | ” | 2% | do | ≤ 3% | do | - |

Pakistan’s QoS Parameters:

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **QoS Parameters** | **Benchmark** | **Remarks** |
| 1. | Network Down-time | < 1 % |  |
| 2. | Network Accessibility | > 99% |  |
| 3. | Grade of Service (end to end blocking) | <= 2 % |  |
| 4. | Service Accessibility | > 98% |  |
| 5. | Call Connection Time | <= 5 sec |  |
| 6. | Call Completion Ratio | > 98 % |  |
| 7. | Mean Opinion Score  (Average of, Average A2B plus Average B2A) | > 3 | As recommended by ITU-T in recommendation number P.862.2 ( PESQ), P.862.3 (POLQA) or latest ITU/Relevant forum recommendation |
| 8. | SMS Success Rate | > 99% |  |
| 9. | End to End SMS Delivery | < 8 seconds |  |

In India and Bhutan, necessary minimum download speed to an individual subscriber from the point of presence (POP) of the Broadband service provider is 512 kbps.

In Pakistan, 256 kbps is the minimum data rate for fixed broadband as defined in Broadband QoS Regulations 2014; 256 Kbps is the minimum User data throughput typical for 3G as per Next Generation Mobile Services (NGMS) License; 2Mbps is the minimum User data throughput typical for 4G/LTE as per NGMS License.

Specific Quality of service benchmarks for meeting these parameters by the service providers in respective SATRC countries are mentioned in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **QoS Parameters** | **India** | **Pakistan** |
| 1. | **Bandwidth Utilization/ Throughput:**  a)Bandwidth Utilization  i)POP to ISP Gateway Node [Intra-network] Link(s)  ii) ISP Gateway Node to IGSP Node upstream Link(s) for International connectivity  b)Broadband Connection Speed (download) | <80% link(s)/route bandwidth utilization during peak hours  (TCBH). If on any link(s)/route bandwidth utilization exceeds  90%, then network is considered to have congestion. For this additional provisioning of Bandwidth on immediate basis, but not later than one month, is mandated.  Subscribed Broadband  Connection Speed to be met >80% from ISP Node to User. | 1. Not applicable 2. 256 Kbps for Fixed Broadband (FTTX, Coax, WiMAX etc)   256 Kbps minimum User data throughput typical for 3G.  2Mbps minimum User data throughput typical for 4G/LTE. |
| 2. | **Service Availability / Uptime**  (for all users) | > 98% | For Fixed Broadband:  Broadband Service Availability (BSA) indicates the number of times we are able to successfully access the broadband services. During testing if “N” attempts are made to connect to the Internet and if “F” times the attempt failed, then Availability = (1–F/N) × 100%. An attempt is declared as failure, if we are not able to connect to Internet within 75 seconds for wireline communications and 120 seconds for Wireless communications. The testing method is:-  (i). 10 attempts shall be made in each time slot T1, T2 and T3 to access internet.  (ii). Measure average of three time in T1, T2 and T3.  Bench Marks  Grade – A : 95% or above  Grade – B : > 95% and < 80%  Grade – C : > 80% and < 70%  Grade – D : > 70% and < 50%  Grade – E : < 50%  For Mobile Broadband:  > 99 %  (excluding forced shutdown) |
| 3. | **Packet Loss**  (for wired broadband access) | <1% | Fixed BB  Number of packets (in percentage) which doesn’t reach the destination is called Packet Loss.  Bench Marks  Grade – A : < 2%  Grade – B : Between 2% and 3%  Grade – C : Between 3% and 4%  Grade – D : Between 4% and 5% |
| 4. | **Network Latency** (for wired broadband access)  • User reference point at POP / ISP Gateway Node to International Gateway  • User reference point at ISP Gateway Node to International nearest NAP port abroad (Terrestrial)  • User reference point at ISP Gateway Node to International nearest NAP port abroad (Satellite) | <120 msec  <350 msec  <800 msec | NA |

In Pakistan, various other QoS parameters, defined for Broadband services are as follows:

1. **Network Availability.** To check the availability of the Network or Service, as is claimed or “advertized” by the Broadband Service Providers. This shall verify operator coverage claims.
2. **Link Speed.** The Link Speed (LS) shall be checked against the advertised speeds. Actual link rates shall be measured during the proposed ‘T’ test times.
3. **Retain-ability.** This KPI shall check the retain-ability of the service over a period of 60 minutes.
4. **Download Speed.** One of the key metric in broadband services is the download speed, which defines how much traffic a subscriber can receive to the maximum. The data speed must be at least 60% of the advertised speed of broadband service plan, both download and upload, and this must be experienced at least 70% of the time.
5. **Upload Speed.** This metric define the speed in which the subscriber can send traffic to Internet. It plays a significant role in situations which require upload hungry applications for instance software business development.
6. **Upload / Download Speed Ratio.** The data rate of the ISP’s Access Plan is the maximum data rate. The effective data throughput that a consumer will achieve will vary from time to time and in general may average unto 20 percent lower than the Plan rate.
7. **Contention Ratio.** This ratio of number of subscribers per unit of bandwidth is commonly known as contention ratio and it may vary depending on the quality of service the ISP is planning to offer. Lower the contention ratio, higher the QoS.
8. **Round Trip Time (RTT).** Round Trip Delay is the time taken for the traffic to reach a particular destination and return. Round-trip delay time is significant in systems that require two-way interactive communication where the round-trip time directly affects the throughput rate.
9. **Jitter.** Jitter is the fluctuation/variation of end-to-end delay from one packet to the next packet within the same packet stream/connection/flow. Jitter experienced by the packets is more relevant for Real-time traffic like VoIP.

Besides technical KPIs, there are some non-technical KPIs, one amongst them is

**Tariff Comparison**-The cost of all the packages provided by each Broadband Service Providers (BSP’s) shall be collected on business/residential or any other package plans (if any). The cost shall be calculated in Pak Rs. as per following:-

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Speed/Package | BSP- A | BSP-B | BSP-C | BSP-D | BSP-E | BSP-F | ……… |
| 1 Mbps |  |  |  |  |  |  |  |
| 2 Mbps |  |  |  |  |  |  |  |
| ------- |  |  |  |  |  |  |  |

Pakistan’s QoS benchmarks for Mobile Broadband are as below:-

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Technology** | **User data throughput** | **Signal Strength (RSCP)** |
| 1 | 3G (2100 MHz) | A minimum user data rate of 256 kbps typical | A minimum outdoor signal strength of -100 dBm must be achievable with 90% confidence within the areas defined in license. |
| 2 | 4G/LTE (1800 MHz) | A minimum user data rate of 2 Mbps typical | A minimum outdoor signal strength of -100 dBm must be achievable with 90% confidence within the areas defined in license. |

In case of Bhutan, the QoS parameters, defined for Broadband services are as follows:

|  |  |
| --- | --- |
| **QoS Parameters** | **Benchmarks** |
| **Network availability** | Over 90% |
| **System accessibility**  Dial up access  Leased line access | Over 85%  Over 95% |

In India, a financial disincentive is imposed on the Broadband service provider who fails to meet the Quality of Service benchmarks. An amount not exceeding Rupees fifty thousand per parameter and in case of second or subsequent such contravention, an amount not exceeding rupees one lakh per parameter is to be paid for each contravention. Also, financial disincentive of an amount not exceeding Rupees ten lakh per parameter is imposed on the Broadband service provider who furnishes false Quality of Service compliance report. In Pakistan also, as per Section 23 of the Telecom Act, on contravention to license conditions, rules/regulations (which includes QoS benchmarks), an operator can be served with a show cause notice to respond within 30 days, after hearings and proceedings a determination is issued, in case there is a violation and the same has not been addressed, financial penalty can be imposed on a case to case basis considering the severity of violation.

In Bhutan, no such financial disincentives are imposed.

To ensure quality of service and to monitor the performance of service providers against the QoS parameters prescribed in the regulations, SATRC countries have adopted certain strategies, as shown in the table below:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Name of the Strategy** | **India** | **Nepal** | **Bhutan** | **Afghanistan** | **Maldives** | **Pakistan** | **Bangladesh** | **Iran** | **Sri Lanka** |
| 1. | Performance Monitoring report (PMR) | ✓ | ✓ | 🗶 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. | Audit of QoS | ✓ | - | 🗶 | ✓ | - | ✓ | 🗶 | ✓ | ✓ |
| 3. | Survey of Customer satisfaction | ✓ | ✓ | ✓ | 🗶 | 🗶 | ✓ | 🗶 | 🗶 | Planning to implement in the 1st quarter of 2016 |

1. ***Performance Monitoring report (PMR)***

The service providers are required to submit their PMR at different frequencies in various SATRC countries, as shown in the table below:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **India** | **Nepal** | **Bhutan** | **Afghanistan** | **Maldives** | **Pakistan** | **Bangladesh** | **Iran** | **Sri Lanka** |
| Customer information PMR quarterly and Network PMR monthly | Monthly | 🗶 | Quarterly | Quarterly | Quarterly | Customer information related PMR monthly | Each month also the regulator can monitor service providers online | Monthly |

1. ***Audit of QoS***

In Afghanistan, Sri Lanka and Iran, the audit of network for QoS is done by the telecom regulator. In Iran, another governmental department is also responsible for it. In India, it is done by third party agency. The frequency of audit of the network for QoS for different services, in different countries is mentioned in the table below:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Service Type** | **India** | **Nepal** | **Bhutan** | **Afghanistan** | **Maldives** | **Pakistan** | **Bangladesh** | **Iran** | **Sri Lanka** |
| Mobile telephone service | Quarterly | - | 🗶 | Quarterly | - | Annually and Quarterly | 🗶 | Randomly | Twice a month |
| Basic service | Yearly | - | 🗶 | Quarterly | - | Twice a year | 🗶 | Randomly | Twice a month |
| Broadband service | Yearly | - | 🗶 | Quarterly | - | Twice a year | 🗶 | Randomly | Monthly |

1. ***Survey of Customer satisfaction***

The frequency of carrying out survey of Customer satisfaction, in different countries is mentioned in the table below:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **India** | **Nepal** | **Bhutan** | **Afghanistan** | **Maldives** | **Pakistan** | **Bangladesh** | **Iran** | **Sri Lanka** |
| (by third party agency)  Half-yearly | (by third party agency)  Yearly | - | 🗶 | 🗶 | By third party / or by regulator randomly | 🗶 | 🗶 | - |

In India, Sri Lanka and Nepal, the telecom regulator, also obtains Point of Interconnection (POI) congestion reports on monthly basis from the service providers.

1. **International Practices**

***United Kingdom***

[[5]](#footnote-5)In January 2005, Ofcom required certain companies to gather and publish up-to date information on the quality of their customer service. As a result, these companies got together as an industry and created a website to provide information to consumers(<http://www.topcomm.org.uk>). This website published the service performance of the companies on five particular measures:

• how long it takes each provider to connect customers with a new line;

• how many faults they have to fix;

• how long they take to fix those faults;

• how quickly they deal with complaints; and

• the accuracy of their bills.

Ofcom published a statement on 29th July, 2009, stating its decision to withdraw the Topcomm Direction immediately for the following reasons:

“• *The scheme doesn’t meet its original objectives;*

*• The scheme costs the companies that support Topcomm a lot of time, money and effort to run;*

*• It would be very expensive to alter the scheme and we don’t know if any changes would actually be useful until we carry out further research to better understand what consumer really need;*

*• It’s going to be some time before we have a better idea of what consumers need so it’s best that we remove the scheme sooner rather than later .”*

This notification meant that providers caught by the Topcomm scheme no longer have to collect and publish QoS data.

For fixed broadband services, Ofcom has, for several years, collected information on broadband speeds. This information has enabled consumers to improve their purchasing decisions, and appears to have driven improvements in service quality by operators. Ofcom on 23rd January, 2013 published a Call for Input “Measuring Mobile Voice and Data Quality of Experience”, sought views from all interested stakeholders on:

*“• What information would be valuable to consumers when purchasing mobile services;*

*• What data would be required to produce this consumer information, and*

*• How we could best collect it.”[[6]](#footnote-6)*

Also, Ofcom has published complaints data since November 2006. The data illustrate the level and types of complaints received by Ofcom across all the communications markets. Ofcom believes that publishing the complaints data can be informative for consumers when seeking to compare providers, and useful to intermediaries such as consumer groups, journalists, and price comparison sites, all of which aim to advise consumers.[[7]](#footnote-7)

Ofcom is currently engaged in a range of work which will help improve the information available in this area:

• it will work with the MNOs to develop a common methodology for measuring (Call Completion Success Rates) CCSR across the networks to allow comparisons to be made with a view to publication. If a single, common methodology cannot be found it will endeavour to quantify the size of systematic differences between MNOs’ individual methodologies;

• in relation to 3G and 4G mobile broadband, Ofcom will publish results of field measurement made in five UK cities. This report will highlight how the performance of 4G networks compares to 3G networks; and

• it will continue to work with the MNOs and third parties to improve the information available to consumers on mobile voice and data QoE. It will continue to draw on the best available data, whether supplied by the MNOs, third parties or research commissioned directly by Ofcom.

***Singapore***

[[8]](#footnote-8)The Infocomm Development Authority of Singapore (IDA) has established a set of minimum QoS standards for key services (Broadband, Mobile, Fixed Network Telecoms & Fibre Connection Services and Postal Services). Service providers are required to submit periodic reports of their service quality and IDA monitors their performance to ensure compliance.

The IDA quarterly publishes the QoS performance of service providers with a view to helping customers make informed decisions while choosing service providers. Surveys are also conducted to monitor customer satisfaction and to get customer feedback on how operators’ service can be further improved. Results of these surveys are used by IDA to instruct operators to correct their weaknesses and also to fine-tune their own standards of requirement for operators[[9]](#footnote-9).

To ensure operators’ compliance, the IDA has also established a penalty framework which imposes fines for non-compliance.

IDA regularly reviews the QoS requirements to take into account industry and technology changes, as well as changes in consumer demand, to ensure that the requirements remain relevant.

***Malaysia***

Under the Communication and Multimedia Act of 1998, the Government of Malaysia has published a Ministerial Direction on Quality of Service, named Direction No. 1 of 2002. This directs the Malaysia Communications and Multimedia Commission (MCMC) to determine mandatory standards on the quality of a number of telecommunications services including fixed and mobile voice.

[[10]](#footnote-10)Malaysian consumers are protected by the Mandatory Standards, brought into force by MCMC to monitor and regulate the performance of all relevant service providers. A total of seven Mandatory Standards for Quality of Service has been registered between 2003 and 2011, namely:

* Public Switched Telephone Network Service (PSTN)
* Public Cellular Service (PCS)
* Dial Up Internet Access Service (DIAS)
* Content Applications Service (CAS)
* Public Payphone Service (PPS)
* Digital Leased Line Service (DLL)
* Broadband Access Service (BAS)

The Malaysian Communications and Multimedia Commission monitors compliance to the Quality of Services Standards through reporting based on data collected by the service providers and by actual measurements. Service providers are required to submit audited reports to the Malaysian Communications and Multimedia Commission every six months. The reports are to detail various aspects of their performance and must be accompanied with a duly signed declaration form. MCMC conducts a random audit on the reports submitted by the service providers to ensure the validity and reliability of the service offered.[[11]](#footnote-11)

As at end of June 2014, a total of 60 reports were submitted to MCMC, in which, 24 licensees reported for non-compliances. Non-compliance to the Quality of Service Mandatory Standards is an offence under Section 105(3) CMA 1998. The offenders can be fined not exceeding RM100,000 or face imprisonment not exceeding two years, or both.[[12]](#footnote-12)

In order to improve the quality of services provided by the cellular service providers, MCMC introduced the Mandatory Standards for Quality of Service (Public Cellular Service) Determination No. 1 2013 which came into effect since 9 July 2013. Several criteria have been tightened up such as the rate of dropped calls that was reduced to 3% compared to 5% previously. Meanwhile, the rate for End-point Service Availability (ESA) was increased to 95% compared to 90% previously.[[13]](#footnote-13)

Auditing the Cellular Networks via EESAT for Dropped and Blocked Calls

Cellular network quality in Malaysia is measured using EESAT (Extensive End-Point Service Availability Testing) for benchmarking. In principle, EESAT involves a sequence of test calls, defined by two methods of testing, which are:

* Drive test
* Static test

The MCMC conducts monthly Drive Test measurements on major cellular service providers to ensure that their services are up to mark and aligned with the licence conditions.

Benchmarking the cellular network service quality or network performance analysis is done using the ActixOne analysis system. This system was first introduced in July 2012 as a neutral benchmarking platform as it is able to perform a single multi-vendor drive test survey data analysis. The software system helps to eliminate any differences or disputes between the cellular service providers and the tested results.

Consumer Empowerment Tools for Measuring Quality of Services

MCMC is in the process of developing “QoS Tools”, to promote consumer empowerment and increase transparency as well as crowd sourcing in terms of quality of service improvement and quality of experience for consumers particularly in relation to broadband and cellular services. The objectives of the “QoS Tools” initiative include:

1. Enable consumers to make informed decision on broadband and cellular packages offered by service providers. Consumers can also evaluate and assess service quality and performance of their daily usage as compared with service pledged and performance statistics published by service providers.

2. Enhance the transparency of broadband and cellular performance between consumers and service providers.

3. Evaluate services offered through the data gathered in the QoS Tools downloaded by consumers. It can also be used to analyse the service providers’ performance for further quality of service improvement.

The target users for this “QoS Tools” include consumers, licensees and the MCMC. They can assess to a common QoS Assessment Portal to evaluate, improve and assess performance and quality of service.

1. **Recommendations**

After analyzing the Quality of service regulations and monitoring procedures followed in the SATRC countries as well as in different nations across the globe, the following suggestions are made which can be considered for implementation by members of SATRC in their respective countries:

1. The regulators could issue regulations specifying the Quality of Service (QoS) standards, keeping in view the performance of service providers against the QoS standards, the international standards on QoS and utility of the laid down QoS parameters.
2. There is a need to define each QoS parameter extensively and also to explain the measurement methodology for each parameter so that uniform practice is adopted by all the service providers for measuring, recording and auditing of such performance parameters.
3. To ensure network availability, following parameters, with adequate benchmarks, could be prescribed in the regulations for cellular mobile telephone service:

* BTSs accumulated downtime (not available for service)
* Percentage of worst affected BTSs due to downtime

1. For determining the accessibility there could be three important parameters to be monitored, as mentioned below:

* Call Setup Success Rate (CSSR),
* Standalone Dedicated Control Channel (SDCCH)/ Paging Channel Congestion
* Traffic Channel (TCH) Congestion

1. For determining the Connection maintenance (Retainability), there could be three important parameters to be monitored, as mentioned below:

* Call Drop Rate
* Worst affected cells having more than 3% TCH drops (call drop rate)
* Connections with good Voice Quality

1. To determine the effectiveness of the interconnection between two networks, Point of Interconnection (POI) Congestion parameter, with adequate benchmarks, could be prescribed. This parameter signifies the ease by which a customer of one network would be able to communicate to the customer of another network.
2. To ensure seamless Broadband services across the country, various QoS parameters with reasonable benchmarks could be prescribed. These may include Bandwidth Utilization/ Throughput, Service Availability / Uptime, Packet Loss, Network latency/ Round Trip Time (RTT), Network availability, Link Speed, Download Speed, Upload Speed, Upload / Download Speed Ratio, Contention Ratio, Jitter. Besides technical KPIs, these may also include a non-technical KPI - Tariff Comparison, to compare the plans of various Broadband Service Providers for a given speed.
3. Customer satisfaction is the major determining factor in the emergence of new services, setting standards and designing of networks. Therefore, the customer requirements and expectations should be been given paramount considerations while defining the Quality of service standards.
4. The regulator could conduct customer satisfaction surveys to assess the customer perception of service against the laid down quality of service benchmarks. These parameters, with benchmark in bracket, can include following:
   1. % satisfied with the provision of service (≥ 90 %)
   2. % satisfied with the billing performance (≥ 95 %)
   3. % satisfied with network performance, reliability and availability (≥ 95 %)
   4. % satisfied with maintainability (≥ 95 %)
   5. % satisfied with offered supplementary services (≥ 90 %)
   6. % satisfied with help services including customer grievance redressal ≥ (90 %)
   7. % satisfied with overall service quality (≥ 90 %)
5. The results of the survey on customer perception of service may be made public by the regulator for the information of the customers to generate healthy competition amongst service providers to improve service.
6. The regulator could mandate reporting of performance against quality of service benchmarks through quarterly Performance Monitoring Reports (PMR) and monthly POI congestion reports.
7. The regulator could audit/ inspect, either directly or through an agency appointed by it, the records/ measurement relating to each quality of service parameter. This should ideally also include live testing through drive tests (both operator assisted and independent).The regulator could also require the service provider to get the report submitted to the regulator, audited at its own cost through independent and qualified agency.
8. Since, the customers generally refer the website of its service provider for new tariff plan offer etc., it is more appropriate if the information relating to quality of service is also published on the website of each service provider. Hence, the regulations could provide for publication of information relating to quality of service by each service provider on their website. The regulator could also publish the summary of Quarterly Performance Monitoring reports, the results of audit and customer satisfaction survey undertaken by the regulator through agencies appointed by it on its website. In addition, the regulator may also publish, licensed service area wise, information relating to comparative performance of service providers against quality of service benchmarks for key parameters.
9. The users need to have information on delivered performances of various service providers so that they can make also informed choice about the service providers, based on quality of service performance. The benchmarking could also benefit the service providers as they could compare their quality of service with that of their competitors and could face competition effectively. To facilitate this, two indexes for cellular mobile telephone service, one related to network parameters named Network Service Quality Index (NSQI) and the other index related to customer service named Customer Service Quality Index (CSQI) can be introduced by the regulator. There can be a system of 10 point score for evaluating the performance against each parameter and equal weightage may be given to each parameter. The evaluation of performance on each parameter should be based on whether the service provider has achieved the benchmark or not. Wherever the benchmark is achieved a score of 10 points should be assigned to that parameter. In case the performance on any parameter is below the benchmark, the score in respect of that parameter should be reduced depending on the level of performance.
10. Non-compliance with the Quality of Service standards laid down by regulator amounts to violation of the Quality of Service Regulations. For such violation of the regulations, one of the options for the regulator is to take penal action against the service provider. By imposing penalty for violation of its direction/order/regulation, it is seen that the process takes considerable time and during this process the consumer gets no relief. A delayed action against the service provider is as good as ineffective and the customer is the main sufferer of poor quality of service. The regulator could provide specific monetary compensation to subscribers such as rent rebate in the case of delayed repair of faults, interest on delayed payment of security deposit. However, a combination of financial disincentive and penalty could act as a deterrent against poor Quality of Service. There should be a specific amount of financial disincentive defined for both the cases as mentioned below:

* failure to meet defined benchmarks for QoS parameters
* failure to submit the QoS compliance report on defined time
* furnishing false QoS compliance report to the regulator

Before a financial disincentive is imposed, the service provider should be given a reasonable opportunity of representing against the contravention of the regulation observed by the regulator.

1. A crowd sourcing approach in terms of quality of service improvement is an innovative approach to improve Quality of service in a holistic manner. There could be a comprehensive QoS database maintained by the regulator, where subscribers can provide the input against various QoS parameters. These inputs can be then analysed to study the QoS parameters and areas where the service is not according to the established benchmarks or to recognize the particular areas, where there is a dire need for improvisation.

**CHAPTER-IV: BILLING ACCURACY**

1. **Overview**

High number of consumer complaints about pricing and billing is one of the most common challenge that needs to be tackled by the telecom regulators. These complaints arise despite consumers having almost universal access to pricing information across all services, including for mobile, internet access and smart phone services. This suggests that the provision of information may not in itself be a sufficient measure to protect consumers in the telecom sector.

To tackle this issue, there can be a parameter in the QoS regulation which indicates complaints-based measure of billing accuracy. While analysis of unresolved billing complaints to find root causes is useful in preventing further occurrences of a problem, and is to be encouraged, it is a proactive process. System assessment and performance measurement, if done frequently, has the advantage, of identifying problems and rectifying them before the subscriber becomes aware of them. This reduces the incidence of complaints, benefiting the operator through the reduction of costs of complaint handling, and reducing the burden of complaints referred to the regulator. As such, it could appear appropriate to implement a Code of Practice for metering and billing accuracy.

The major objectives of laying down the Code of Practice for metering and billing accuracy are to:

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

1. **Analysis of responses from SATRC countries**

In order to protect the interest of subscribers from inaccurate billing and charging, the telecom regulators of India and Bangladesh have prescribed a uniform code of practice for metering and billing accuracy, with which a service provider is required to comply. Iran also has some check list which includes some indicators for metering billing accuracy. In Afghanistan, Maldives, Bhutan and Nepal, there is no prescription of such uniform code. But, Nepal is drafting a policy which governs procedure for billing accuracy.

In Pakistan, the theme of Code of commercial practice is uniform for all operators and keeping in line with consumer protection regulations. Each operator/service may develop their own code of practice within the limitations of consumer protection regulations. And each code of practice is evaluated on a case to case basis.

In India, the service providers have to arrange audit of their Metering and Billing System for which the auditors are empanelled by telecom regulator. In Afghanistan, Maldives, Bhutan and Pakistan, there is no such obligation on the service providers to carry out such audits. Nepal is in the process of implementation of audit.

According to the regulations in India, Iran and Bangladesh, the service providers need to furnish an audit report certified by the auditor, to the regulator. This audit report certified by the auditor, for each financial year has to be furnished to the regulator, once a year. In India, it should be submitted not later than 31st July of every year and in Bangladesh, within three months after 31st July. In India, the service providers are required to submit an Action Taken Report on inadequacies to the regulator by 15th November of every year whereas in Bangladesh, this deadline is decided by the their regulator.

In India, during the audit, call data records of one month for the following tariff plans have to be audited in each Quarter:

1. Three prepaid and two post paid plans having the maximum number of customers at the beginning of the Quarter;
2. Two new prepaid and post paid tariff plans launched during the Quarter;
3. Two Special Tariff Vouchers having maximum number of customers at the start of Quarter;
4. Two prepaid data plans having maximum number of customers at the start of Quarter;
5. Two new post paid data plans having maximum number of customers at the beginning of the Quarter.

In India and Iran, the regulator has issued a detailed checklist of audit for the implementation of metering and billing regulation which includes every item of the Code of Practice and the Terms of reference, where the audit covers the following:

1. checking of overbilling
2. checking of roaming charges levied on customers vis-à-vis the published tariff
3. checking of charging for value added services
4. verification of bill delivery process
5. verification of redressal of billing complaints and complaint handling process
6. activation time for recharges

In Bangladesh also, the regulator issues a detailed checklist of audit for the implementation of metering and billing regulation which includes every item of the Code of Practice and the Terms of reference, only if the audited firm is appointed by the regulator. It covers all the parameters as mentioned in the case of India. Also, in Bhutan, the licence terms and conditions contain a detailed checklist of audit for the implementation of metering and billing regulation which includes every item of the Code of Practice and the Terms of reference.

In India, Iran and Bangladesh, the regulator may refer complaints relating to billing for verification by the auditor. The systemic deficiencies observed during audit are to be corrected in a time bound manner.

1. **International Practices**

***[[14]](#footnote-14)United Kingdom***

In UK, Ofcom Metering and Billing Direction sets out the requirements on Communications Provider (CPs) to ensure that the risk to consumers of being incorrectly charged for their use of Public Electronic Communications Services (PECS) is reduced. This Direction applies to any Total Metering and Billing System (TMBS) used for either Retail or Wholesale purposes, or both. A CP providing Retail services shall apply for Approval of its TMBS when the Relevant Turnover from the sum of the Mandatory Services that it provides exceeds £40,000,000 on an annual basis (exclusive of VAT and other taxes directly related to turnover).In order to provide the End-Users with confidence, Ofcom uses independent Approval Bodies (AB), who are accredited to approve those CPs who are required to demonstrate compliance with the Direction.

**Allowable Measurement Capabilities**

A TMBS utilises two distinct types of Events for charging purposes.

Usage Events

These are Event records that are generated by a telecommunications switch, triggered by the use of the service by the End-User.

Non-Usage Events

These are sub-divided into two categories and cover the Event records not triggered by the use of the service by the End-User. The two categories are:

* Non-Recurring Events - These include costs for the provision, change, suspension or removal of services, products and equipment. They are likely to be actions that do not result in the creation of a usage Event record.
* Recurring Events - These include subscriptions and rentals for equipment or availability that are applied on a regular basis to the Bill irrespective of any usage or non-usage Event. The measurement system must be able to confirm that recorded Events fall within the limits shown within section unless otherwise stated, these limits apply to the units of measure used in the systems being measured.

**Usage Events: Measurement Capabilities**

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**Non-Usage Non-Recurring Events: Measurement Capabilities**



**Non-Usage Recurring Events: Measurement Capabilities**



**Performance Measurement Requirements**

Performance Measurement

The performance of the TMBS shall be assessed on the basis of how many errors are made. An error will be defined as exceeding the allowable measurement capability as set out in tables above. This assessment of performance requires that the accuracy requirements are assured by a robust and credible management system, controlling processes and monitoring and recording Events. This is separated into the elements above for the purposes of demonstrating compliance with the allowable measurement capabilities.

Performance will be based on measurements taken over a rolling 12 month average.

The measurements and other performance indicators which the CP must produce and present to its AB on a regular basis to demonstrate that the charging performance of its TMBS is accurate and consistent shall be set out in detail in the Measurement Strategy Document (MSD).

Measurement processes shall be effective in supporting increased knowledge of the end to end TMBS. They shall include the identification of root causes of bill inaccuracies and the implementation of activities aimed at achieving continual improvement of End-Users’ bills.

MSD Requirements

It is a requirement of the Direction that the CP produces a MSD and agrees its content with its AB. In order to obtain the AB’s agreement to the content of the MSD, the CP must show that the proposed strategy will enable the accuracy and consistency of charging to be demonstrated to the satisfaction of the AB.

As each TMBS is unique, its MSD will need to be tailored to ensure that its content relates to the High Level Description (HLD) and risk management assessment. Typically the MSD will contain Key Performance Indicators relating to charging accuracy and detail the controls and measurements in place in areas such as, but not limited to:

a) Billing pipeline measures;

b) Bill accuracy checks;

c) Customer complaint handling;

d) Credits and Bill adjustments;

e) Handling of suspense and write-offs; and

f) Testing to ensure the accuracy of published Tariffs.

There may be a requirement for the MSD to contain controls and measures specific to certain customer groups, for example large business customers or mobile pre-pay customers, to ensure that risks and potential charging errors specific to these groups are mitigated and recorded.

***[[15]](#footnote-15)Australia***

In Australia, the Billing Standard is administered by an Industry Forum of Operators, rather than by the Regulator and Appointed Approval Bodies. Industry body responsible is the Australian Communications Industry Forum (ACIF). Call charging and billing accuracy ACIF C518:2006 Code applies to all Carriers and carriage service providers that supply a standard telephone service across:

1. a Public Fixed Circuit Switched Network; or
2. a Public Mobile Circuit Switched Network .

**Tolerance levels for Billing Accuracy Parameter errors**

Billing Accuracy Parameter means any one of the following which are used to determine whether a Test Call is accurately billed and charged. Tolerance levels specified in the table below take into account what is observed by the Test Call system or independent source of Test Call data and what is recorded by the Carrier’s or CSP’s call charging and billing system. The Billing Accuracy Parameters are:

(a) Call Start Time Error; or,

(b) Call Duration Error; or,

(c) Called Number Error; or,

(d) Rated Price Error; or,

(e) Additional Call Error; or,

(f) Missing Call Error.



**Performance Indicators**

The allowable number of inaccurately charged and billed Test Calls in a sample must be less than or equal to the accuracy limits in table below at 95% confidence level across the sample of Test Calls.

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**Verification of call charging and billing accuracy**

Compliance with the Code for call charging and billing accuracy by Carriers and CSPs must be determined by the generation of Test Calls through a Test Call system and/or extracted from live traffic and/or wholesale/interconnect billing data. Each Carrier or CSP is responsible for testing its own call charging and billing accuracy and associated Billing Accuracy Parameters as relevant to the Code A Carrier's or CSP’s testing program may be undertaken either by:

(a) that Carrier or CSP; or

(b) an External Testing Body contracted by that Carrier or CSP for this purpose.

The Test Plan must outline the processes and systems deployed by the Carrier or CSP to determine if the testing results indicate that the Carrier or CSP complies with the requirements of the Code

A minimum of four broadly representative rating plans must be tested unless the rating plans that are tested cover more than 50% of the Carrier’s or CSP’s traffic as measured by:

(a) total number of calls; or

(b) revenues; or

(c) subscriber numbers; or

(d) duration.

The Statement of Process Compliance is prepared by the Code Signatory which states that an Independent Qualified Assessor has determined that the Test Plan has been prepared by the Code Signatory in accordance with the requirements of the Code. A Code Signatory must demonstrate ongoing compliance with the Code by submitting an ongoing annual Self Attested Statement of Compliance to ACIF. The ongoing annual Self Attested Statement of Compliance is to be submitted to ACIF by the Code Signatory no longer than

(a) four months after the end of the final Test Call being completed; and

(b) thirteen months from the date of the last Self Attested Statement of Compliance that demonstrated compliance with the Code.

***Hong Kong***

[[16]](#footnote-16)The Telecommunications Authority of Hong Kong (TA) issued a Statement on “Billing and Metering Accuracy of Public Telecommunications Services in Hong Kong” on 4 August 2000. A Billing and Metering Integrity Scheme (BMIS) was proposed to ensure the accuracy and integrity of the metering and billing systems of operators in the telecommunications industry. BMIS is a set of testing criteria and quality assurance procedures based on relevant international standards to check the accuracy in measuring call duration and billing the calls made. The BMIS criteria specify that the number of inaccurately metered calls shall not exceed 0.01% of total calls and the error of billed amount shall not exceed 0.01% of the total billed amount in a single bill. Operators joining the scheme have to follow the quality assurance procedures prescribed by the Office of the Communications Authority (or its predecessor Office of the Telecommunications Authority or OFTA) to check their internal process routinely and to ensure that the accuracy criteria are met.

All fixed network operators, mobile network operators, Mobile Virtual Network Operators (MVNOs) and Public Non-Exclusive Telecommunications Service (PNETS) operators may voluntarily participate in BMIS if they offer services (such as IDD services, mobile services and dial-up Internet services) which are charged on the basis of time of usage. The BMIS is not a compulsory licensing requirement and some operators have out of commercial consideration chosen not to join the scheme.

In order to have an effective monitoring system to keep track of the performance and compliance status of operators with respect to the BMIS, the Authority has an intention to publish and update from time to time the names of operators whether they are in compliance with the BMIS or not on the OFTA’s website in order to allow the public to know the Compliance Status of individual operators. Customers can, based on the published information, make their informed choices and decisions of subscribing to specific operators.

[[17]](#footnote-17)The main purpose of the Quality Assurance Manual (QAM), published by the Authority, is to provide a quality assurance framework such that the operators can implement their self-appraisal systems in a timely and responsive manner in compliance with the BMIS. Apart from this manual, the operators are required to develop their own Detailed Operation Manual (DOM) and perform measurements or generate Test Calls in accordance with the requirements and procedures stipulated in this manual. If necessary, OFTA or OFTA’s appointed agent will perform an on-site audit on operators’ Billing and Metering Systems.

**Telecommunications Metering Acceptance Model (the Metering Model)**

The purpose of the monthly Metering Test is to examine whether the metering integrity standard of 1:10,000 is met and to ensure an acceptable quality level in metering accuracy for a specific traffic in a month. 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 Metering Model follows some of the requirements in ISO 2859-1:1999(E) with the details given in the following table:

**Table: Telecommunications Metering Acceptance Model**



Note 1 : Each mobile network operator is required to conduct a number of Test Calls stated in Table above 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).

**Switching Rules**

**Normal to Tightened** - 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.

**Tightened to Normal** - When five consecutive monthly Metering Tests that have been considered acceptable on original inspection, operators are allowed to switch to the normal inspection.

**Normal to Reduced** - Operators can switch to the reduced inspection provided that all of the following conditions are satisfied:

a) the current value of the switching score is at least 30; and

b) reduced inspection is considered desirable by the operator.

**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. For example, the switching score is 2 when the monthly Metering Test in, say, May 2002 is passed. The switching score is 4 when monthly Metering Tests in May 2002 and June 2002 are passed. The switching score is reset to zero if the monthly Metering Test in July 2002 failed.

**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.

The following are the Metering Tolerance for different services:

**Table: Metering Tolerance for Different Services**



Note 2: Mobile Service is applicable to mobile local calls, mobile IDD calls and mobile ETS calls.

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. 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.

**Telecommunications Billing Acceptance Model (the Billing Model)**

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 below. The purpose of the monthly Billing Test is to examine whether the billing integrity standard of 1:10,000 is met and to ensure an acceptable quality level of billing accuracy for the bills issued in a month.

**Table: Telecommunications Billing Acceptance Model**



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.

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.

1. **Recommendations**

After analyzing the mechanisms implemented in the telecom sector to ensure billing accuracy in the SATRC countries and in various other countries, the following suggestions are made which can be considered for implementation by members of SATRC in their respective countries:

1. The regulators could issue Code of Practice for metering and billing accuracy, with which the service providers are required to comply. It should include the following salient features:
   1. **Information relating to Tariffs**
2. Before a customer is enrolled for any telecommunication service, he shall be provided the detailed information relating to the tariff applicable for that service.
3. The customer shall be provided a copy of the Customer Acquisition Form at the time of the enrollment and shall also be informed in writing, within a week after the activation of service, about -

(i) the tariff plan subscribed by him;

(ii) quantity related charges such as the charge for each SMS message, or kilobyte of data etc;

(iii) accuracy of measurement of time, duration and of quantity, and also the resolution and rounding rules, including the underlying units, used when calculating the charges for an individual event or an aggregation of event; and

(iv) contractual terms and conditions for provision, restriction and termination of service

1. Where a value-added service (e.g. download of content, such as a film clip or ring tone) or entry to an interactive service (such as a game) can be selected through a choice of the service user (e.g. by dialing a specific number) then the charge for the service must be provided to him before he commits to use the service.
2. The information about the tariff plans, Plan Vouchers, Top Up Vouchers, Special Tariff Vouchers and Combo Vouchers on offer shall be available on the website of the service provider.
   1. **Accuracy of Measurement**
3. Unless otherwise specified in the published Tariff or previously agreed Tariff, a charge could be determined in accordance with the following limits:

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

(i) Between +1 seconds and –1 second; or

(ii) Between +0.01% (1:10,000) to –0.02% (1:5,000); whichever is less stringent;

(b) where the charge is dependent upon the time of day, the time of day shall be recorded to within ±1 second,

(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%).

* 1. **Reliability of Billing**

1. The performance of a Total Metering and Billing System could be, subject to the tolerances specified in the table below:

###### Total Metering and Billing System reliability performance requirements

|  |  |
| --- | --- |
| **Chargeable events** | **Performance** |
| Number under or not charged | 0.1% (1 in 1000) |
| Number overcharged | 0.004% (1 in 25,000) |
| [[18]](#footnote-18)Value under or not charged | 0.05% (1 in 2000) |
| Value overcharged | 0.002% (1 in 50,000) |

* 1. **Applying Credit to Accounts**

1. For post-pay accounts, payments made by a customer could be credited to his account within 3 working days of receipt of the cash/ cheque. Where credit is given by the service provider, this could be applied within one working day of its agreement.
2. For pre-pay accounts, top-up credit could be applied to a customer’s account within 15 minutes of its application. Where credit is given by the service provider, this could be applied within 1 day of its agreement.
   1. **Timeliness of Post Pay Billing**
3. The timeliness of bill issue or bill data file issue could be subject to systematic processes. Any chargeable events the details of which are not available when the bill is prepared should be included in a subsequent bill, not later than the fourth monthly bill after the chargeable events occurred. Any details not so presented shall be written off and if significant be counted against the performance for undercharged events.
   1. **Restriction and Removal of Service**
4. Where the service provider unilaterally intends to restrict or cease service to the customer, a notice could be provided to the customer in advance of such action so that the customer has reasonable time to take preventive action to avoid restriction or cessation of service.
   1. **Complaint Handling**
5. The service provider could have a documented process for identifying, investigating and dealing with billing complaints and creating appropriate records thereof. The service provider should carry out a root cause analysis for each upheld billing complaint, categorise the cause and establish proportionate remedial action to correct it. Where the root cause affects multiple customer accounts, then all affected Bills shall, if practicable, be included in a recovery programme.
6. Where remedial action has not been completed and the cause is likely to affect other bills when issued, then the service provider should take reasonable steps to ensure that they are checked and, if necessary, corrected, before being sent to the customer. If not checked and corrected such Bills should be included in a recovery programme.
   1. **Materiality**
7. Compliance with the requirements contained in this regulation could be demonstrated in relation to products and services that have a material impact on the customer’s bill. This materiality may deemed to be:
8. where the service provider’s turnover from a product or service comprises 5% or more of its total turnover with the customers targeted for that product or service; or
9. where the number of customers subscribing to a product or service offered by the service provider comprises 5% or more of the customers targeted for that product or service; or
10. at the specific direction of the telecom regulator.
11. The telecom regulator could notify the panel of auditors to certify the Metering and Billing System of service providers. The service providers may appoint any one of these Auditors for auditing their billing system vis-à-vis the Code of Practice for metering and billing accuracy. The certification of the billing system should be done and then filed to the telecom regulator on an annual basis. The service providers shall take corrective action on the inadequacies, if any, pointed out by the Auditing agency in the Certificate and an Action Taken Report thereon should be filed with telecom regulator by a pre-defined date of every financial year.
12. CDR (Call Data Records) audit is the most important part of the metering and billing audit. CDR audit should be representative of the whole year rather than for a particular period. Therefore, the audit of the CDRs could be done throughout the year in such a way that in every quarter, one month CDRs of the selected plans/Special Tariff Vouchers are audited. The CDR under different tariff plans could be audited in each Quarter in a manner so as to include.---
13. three prepaid and two post paid plans that have the maximum number of customers at the beginning of the Quarter;
14. two new prepaid and post paid tariff plans launched during the Quarter;
15. two Special Tariff Vouchers having maximum number of customers at the beginning of the Quarter;
16. two prepaid data plans having maximum number of customers at the beginning of the Quarter;
17. two new post paid data plans having maximum number of customers at the beginning of the Quarter.
18. The Authority could issue, from time to time, the Guidelines for Audit and Checklist for Audit of the Metering and Billing System. Also, the telecom regulator could lay down the obligations of the auditor clearly so that there is transparency in the functioning of the auditor. This will also help telecom regulator in getting timely information about the audit from the auditor and the progress of refunds, if any.
19. To strengthen the effectiveness and compliance of the said regulations, financial disincentives for delay in submission audit reports and Action Taken Reports need to be in place. In case the audit observations find excess charging, the service provider should refund the overcharged amounts to affected customers within two months. The service provider should be liable to pay financial disincentive, in case of violation of this provision also.

**CHAPTER-V: MOBILE NUMBER PORTABILITY**

1. **Overview**

Number portability enables a subscriber to switch between services, locations, or operators while retaining the original telephone number, without compromising on quality, reliability, and operational convenience.

Number portability implementation removes barriers to competition between operators and services and ensures a dynamic, fully competitive market. The two constituencies that benefit the most from the introduction of number portability in a country are the subscribers, and operators who price competitively and provide quality service. In the absence of Number portability mechanism, subscribers have to change their telephone numbers when changing operators. Changing a telephone number can be a major inconvenience and a barrier preventing them from exercising the choice of changing operators. As a result, the customer may be unable to take full advantage of the growing competition among operators or the introduction of new services and technologies.

Number portability eliminates these hurdles and provides immense benefits to the subscriber. These benefits may be categorized as:

a. **Type 1** benefits accrue to subscribers who retain their telephone number when switching an operator, and include cost savings from having to change mobile number. Such subscribers are able to avoid the costs of reprinting stationary, informing callers, changing signs and lost business.

b. **Type 2** benefits are those that arise out of efficiency and service quality improvements and any associated price reductions resulting from increased competition.

c. **Type 3** benefits are those that accrue to callers to porting users who are able to avoid the need to change entries in their diaries, directories, databases and abbreviated dialers. They would also dial fewer wrong numbers and make fewer directory inquiries.

Additionally, subscriber also benefits from lower prices, due to the competition between operators to provide the best service packages, customer service, or other benefits. Introducing number portability will allow some of subscribers to shift between operators and could improve subscriber satisfaction once it is introduced. Operators who provide the best quality of service and coverage, and highest ‘value-for-money’ will benefit because consumers will prefer to begin service with them and will no longer hesitate because of changing phone numbers.

Designing efficient, simple, secure and yet practical porting procedures for number portability may involve addressing issues such as the role of retailers, the need to change SIM cards or handsets, existing customer obligations, authentication of customers requesting a port, communication arrangements between entities during the porting process, refusal to port, time to port, and procedures for porting large quantities of numbers at a given time. The success of introduction of any service in a telecom network is highly dependent on how cost-effective it is to the end users, and the cost burden it imposes on the concerned parties for its implementation. In this respect, the implementation of number portability should be cost-effective to ensure its success.

1. **Analysis of responses from SATRC countries**

Although in India and Pakistan, Full Number Portability (inter and intra Licensed Service Area MNP) has already been implemented, majority of SATRC countries like Sri Lanka, Bhutan, Bangladesh, Maldives and Afghanistan have not yet implemented it. In Nepal, NTA is studying the implementation of the system. In Iran, Full Mobile Number Portability will be implemented on May 2016 in the whole of Iran.

In India and Pakistan, MNP is allowed irrespective of the mobile technology (GSM/CDMA). Iran also intends to allow it irrespective of the mobile technology. In Pakistan, once the Customer Acquisition Form (CAF) is filled by the applicant of MNP service, the customer receives a code, Number Portability Request (NPR) No. which is used for the porting. In India, the subscriber desirous of porting his mobile number needs to obtain ‘Unique Porting Code’ (UPC) by sending SMS from the mobile number to be ported. To obtain UPC customer has to send SMS to number ‘1900’ with the text ‘PORT’ followed by space followed by the 10 digit mobile number to be ported. The UPC so obtained will be valid for 15 days for all service areas except J&K, NE & Assam Service Areas where it will be valid for 30 days. Iran intends that UPC will be obtained by sending SMS in response to CRDB message, till 1 day and after checking by CRDB, UPC will be issued.

In India, the service provider may charge porting charge, maximum up to Rs. 19 whereas in Pakistan only the SIM cost is charged. The porting charge is undecided in Iran.

**Eligibility for porting**

In India, a subscriber holding the mobile number is eligible to make a porting request only after a time period of 90 days from the date of activation of his mobile connection. If in case, the subscriber has previously done porting, then he will be eligible only after a time period of 90 days from the date of the previous porting. Iran also intends to make the subscriber eligible to make a porting request only after a time period of 90 days from the date of activation. In Pakistan, these time periods are 2 months for both the cases.

In India, at the time of porting request, a post paid subscriber is required to submit an undertaking that he has already paid all the dues as per the last bill to the Donor Operator and that he would be bound to pay all the dues to the Donor Operator till its eventual porting and agrees that in the event of non-payment of any such dues to the Donor Operator, the ported mobile number is liable to be disconnected by the Recipient Operator. In Pakistan, no such undertaking is required and porting is not completed unless dues are cleared from the Donor Operator. Iran also intends to do so.

In India, Pakistan and Iran (intends), in the case of a pre-paid subscriber, he needs to give an undertaking that he understands that at the time of porting, the balance amount of talk time, if any, would lapse.

**Grounds for rejecting porting request**

The conditions under which a Porting request can be rejected in India, Pakistan and Iran (intends to make) are as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Conditions** | **India** | **Pakistan** | **Iran** |
|  | If the outstanding payment is certain amount of money. | ✓  (Rs. 10/- or more) | ✓  (Any amount) | ✓  (1 Rials or more) |
|  | If it has been made before the expiry of a period of certain days from the date of activation of a new connection. | ✓  (90 days) | ✓  (2 months) | ✓  (90 days) |
|  | If it has been made before the expiry of a period of certain days from the date of the previous porting. | ✓  (90 days) | ✓  (2 months) | - |
|  | If change of ownership of the mobile number is under process. | ✓ | ✓ | ✓ |
|  | If the case related to the mobile number sought to be ported, is sub-judice. | ✓ | ✓ | ✓ |
|  | If the mobile number sought to be ported has been prohibited by a Court of Law. | ✓ | ✓ | ✓ |
|  | If the subscriber has applied for inter-service area porting. | 🗶 | 🗶 | 🗶 |
|  | If the unique porting code mentioned in the porting request does not match with the unique porting code allocated by the Donor Operator for the mobile number sought to be ported or validity of UPC has expired. | ✓ | ✓ | - |
|  | On the ground of subsisting contractual obligations with certain exceptions | ✓ | - | - |

**Withdrawal of a porting request**

In India and Pakistan, there is a provision for the withdrawal of porting request. Iran also intends to make it. The features of this provision are mentioned in the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Features** | **India** | **Pakistan** | **Iran** |
|  | The time limit in which a subscriber may withdraw his porting request | Within 24 hours | Within 24 hours | Before activation of new SIM card |
|  | Medium of informing the recipient operator about the withdrawal | In writing | Through customer care number |  |
|  | Any obligation on the service provider to refund the porting charges paid | No | No | - |

**Porting time**

In case of Pakistan, the maximum time period for the completion of porting process is 3 days whereas in India, this time period is 7 working days (in the case of J&K, Assam and North East licensed service areas the maximum time allowed is 15 working days). Iran intends to regulate this time period as maximum 5 days for post paid and 3 days for prepaid.

**Activation of ported number**

In India and Pakistan, the Recipient Operator will intimate the date & time of porting to subscriber. Iran also intends to do so. Iran has no service disruption time. In Pakistan also, there is no service disruption time, whereas in India the service is disrupted for around 2 hrs during night time on the date of porting. According to the India’s MNP regulation in force:

At the date and time of porting fixed by the Mobile Number Portability Service provider, the Mobile Number Portability Service provider shall communicate to the Donor Operator its instructions for disconnection of the mobile number and the Donor Operator shall, immediately and in any case within two hours of receipt of such instructions,—

(a) comply with such instructions; and

(b) report compliance of such instructions to the Mobile Number Portability Service provider.

Upon receipt of the instructions for activation of the mobile number the Recipient Operator shall, immediately and in any case within two hours of receipt of such instructions,—

(a) comply with such instructions; and

(b) report compliance of such instructions to the Mobile Number Portability Service provider.

1. **International Practices**

***[[19]](#footnote-19)Malaysia***

In Malaysia, 'Porting' is the act of switching to a new mobile service provider without having to change their mobile number. However, only active mobile numbers can port. Thus, consumers are advised not to terminate their current line before porting. Both prepaid and postpaid users can port. Business/Corporate accounts holders can also port, subject certain guidelines.

**Before consumers port**

If consumers have any overdue bills or have existing contracts with their current mobile service provider, the current mobile service provider will reject their port request which is made by the new mobile service provider. In such a case, they will not get a refund of the administrative porting fees. For prepaid users, consumers need to know that all existing credit will expire upon successful porting and not be carried to the new mobile service provider.

Steps to be followed by the consumer to port to a new service provider

* + Consumer will have to go to the new mobile service provider’s Service Centre or Authorised Dealer to request for number porting. (request to port will act as a notice to the consumer’s current service provider to terminate your subscription.)
  + Fill in a Service Registration Form and pay the porting fees for processing. Consumer will be issued with a new SIM card.
  + Upon approval, the new mobile service provider will inform the consumer that you have successfully ported when the new SIM card is activated.

**Porting related information**

* The porting process will not take more than 5 business days for individual porting whereas for business porting, it will not take more than 10 business days.
* Consumers can port their number more than once but they cannot make more than one MNP request within the same period to different mobile service providers.

For individual or consumer ports, consumer has to provide:

* MyKAD / Police or Army ID (if in the armed forces)/ Passport/ Old IC.
* A copy of his current bill from his existing mobile service provider if he is a Postpaid user (depending on his new mobile service provider.)

For business ports,they have to provide:

* Letter of authorisation from the company containing customer name, business registration number, account number from current mobile service provider.
* Consumer can appoint a representative or an agent to do his number portability request.However, the following documents are required by the new service provider for processing.
* A proxy authorisation letter signed by the registered customer or authorised signatories (for business porting).
* A copy of the registered user’s MyKAD/ other ID.
* A copy of his representative or agent’s MyKAD/ other ID.
* The new mobile service provider must verify the customer’s request and validate the supporting documents.
* Consumer cannot dictate the date and time at which his number should be ported. Upon receiving the porting request from consumer, the new mobile service provider will automatically send it for processing. Consumer will be informed once the porting validation process is completed, and when his new SIM card is activated.
* The maximum that a mobile service provider can charge for a port is RM25 but the fees might vary downwards from one service provider to another. This fees will cover the administrative charges, issuance of new SIM card and all other costs in relation to the port.
* The consumer may cancel his port request with his new mobile service provider before it is approved. However, porting fees are not refundable as the administrative charges and costs for SIM issuance would have already been incurred.
* The consumer will still enjoy the same services during the porting process, except for International Roaming Services, which his current mobile service provider may suspend upon his porting request.

Rejection of Port Request

To ensure that your porting request is approved, consumers need to ensure:

* No overdue payments with their current mobile service provider.
* No contract with their current mobile service provider.
* Correct identification details.
* Their account is active.

***United States***

Under the Federal Communications Commission's "local number portability" rules, consumer can switch telephone service providers for wireline, wireless or Voice over Internet Protocol and keep his existing phone number if he remains in the same geographic area. If consumer is moving from one geographic area to another, however, he may not be able to take his number with him.

**Initiating the process**

Consumer may request service from a different company at any time. When changing companies, the FCC urges the consumer to:

* Do not terminate service with the existing company before initiating new service with another company.
* Contact the new company to start the process of porting of number.
* Provide the new company with the 10-digit phone number and any additional information required, which may include the customer account number and passcode, along with the five-digit zip code.

**Fees and charges**

* Companies may charge their customers fees to recover the costs that they incur in providing number portability. The consumer should ask the new company whether it charges any number portability fees and whether those fees can be waived.
* Companies may not refuse to port a number because a consumer has not paid for porting.
* Once the consumer requests service from a new company, his old company can't refuse to port his number, even if he owes money for an outstanding balance or termination fee; however, he is still obligated to pay any unpaid balances or fees, if applicable.

**[[20]](#footnote-20)Porting process time**

* For a wireless-to-wireless transfer, the porting process should take approximately two and a half hours from the time the porting request is made of the old carrier. The FCC has not mandated a specific time frame for the wireless-to-wireless porting process. Two and a half hours is the time frame agreed upon by the wireless industry, and the FCC encourages carriers to use that time frame.
* A wireline-to-wireless port will probably take longer to complete, and could take several days. Before porting between wireline and wireless phones, consumers should ask their new service provider how long the process will take.

**Using a new phone**

For various reasons, wireless handsets are often incompatible among different wireless service providers. Consumers will likely need to purchase a new phone, even when they retain the same phone number. Even when a phone can be reprogrammed to work on a new network, most carriers may have policies against doing so.

**'Mixed service' during porting**

If the consumer ports from a wireline phone to a wireless phone, there may be a period of "mixed service" – when he essentially has two telephones with the same number. The consumer should ask his new wireless company whether he will be able to continue using his current wireline number during the one-day transfer process. Also, if he ports from a wireline phone to a wireless phone, his wireline long distance company will not move with him. The long distance service will generally be provided by the consumer’s new wireless company, which he should verify with the new wireless company.

**Emergency services**

In some areas, 911 operators automatically receive the phone number or location of a wireless call, but in many areas the technology capable of providing that information – known as Enhanced 911 or "E911" – is not yet available.

During the one-day porting process - if there is a period of "mixed service" –the consumer’s E911 service may be affected. Calls should go through, but 911 operators may not be able to call him back if disconnected. Before porting, the consumer should ask the new company if the one-day porting process will affect a 911 call.

**Filing a complaint**

If consumer has a problem porting his phone number from one service provider to another, first try to resolve it with the service provider. If he cannot resolve the problem directly, he has multiple options for filing a complaint with the FCC:

* Online
* By phone
* By mail

***Hong Kong[[21]](#footnote-21)***

According to the, procedures for Mobile Number Portability Provision, established by the Hong Kong’s telecom regulator Office of the Communications Authority (OFCA), Mobile Number Portability (MNP) is the ability for a customer to retain their assigned telephone numbers when changing the subscription from one mobile operator to another mobile operator.

**Actions by the (Recipient Network Operator) RNO**

The RNO should take the following actions on receiving a customer who wishes to port their number:

(a) Identify the following types of customers:

(i) For a Personal User: by checking the customer against their ID Card or Passport if appropriate.

(ii) For a Corporate User: by checking the information supplied on the MNP Application Form against the BR copy.

(iii) For Institution User : by checking the information supplied on the MNP Application Form against the institution's registration copy.

(iv) For Pre-paid SIM Service User : by checking the validity of the number assigned to the pre-paid SIM service and the cardholder certificate, if applicable .

(b) Identify the Donor Network Operator (DNO).

(c) Confirm whether the customer's number is still active.

(d) Collect necessary information.

(e) Highlight to the porting-in customer in detail on the MNP Application Form that the RNO would not be held responsible for any remaining liability that the porting-in customer still has with the DNO after porting in.

(f) Explain carefully to customer the procedure/charges involved for canceling the porting request.

(g) Collect a ticket for the cutover window allocation and inform the customer of the proposed cutover time.

(h) Request the customer to switch on the mobile phone all the time during the porting process in case it is required to inform the customer for any changes in cutover timings, or request for additional information or details etc.

**Actions by the DNO**

The DNO on receipt of the Number Portability Request (NPR) should check the accuracy of the Directory Number (DN) and customer's name and ID/BR against their own records. If the information is successfully verified, the DNO should authorize the porting by issuing the Acknowledgment to NPR (AKNPR) and terminate the service associated with the number during the cutover window.

**CRITERIA FOR REJECTING/CANCELLING A PORTING REQUEST**

**By the DNO**

The DNO may reject a porting request only under the following circumstances :

* Incorrect/incomplete name of the customer in English
* Incorrect/incomplete HK Identity Card / Passport /Business Registration /institution's registration/card holder certificate number
* Mobile number(s) ceased to be assigned by the DNO
* Mobile number(s) owned by different customer
* Report of stolen/lost handset/SIM card by original customer together with a valid police case report identifying the case
* Incomplete/incorrect information on the NPR sent by the RNO
* Double porting

Specifically the DNO may not reject a porting request due to any financial, contractual or other concerns or issues it may have with the customer.

**By the RNO/Customer**

The RNO and customer may cancel a porting request in accordance with some conditions if they so wish.

**By other Network Operators**

**DNO's Maintenance Agent (MA)**

The DNO's MA may cancel a porting request (specifically an APN) if on checking it finds that the APN has no associated AKNPR or that the DN or cut-over window are different in the APN to the associated AKNPR.

**PORTING OF MOBILE NUMBERS ASSIGNED TO PRE-PAID SIM CARD USERS**

The RNO has to inform the customer that when a mobile number of a pre-paid SIM service is ported out, the residual stored value in the SIM service shall be subject to the terms and conditions of the service with the DNO. It is currently an industry practice that all remaining values on pre-paid SIM service are neither refundable nor transferable.

The RNO should verify the mobile number of the pre-paid SIM service by using Calling Number Display Service or any other suitable means. The DNO should facilitate the porting request by checking whether the service is terminated or not. For clarification, the mobile number of the pre-paid SIM service is considered terminated by the DNO if the prepaid SIM service expires on the date of porting, or no stored values remained, or the porting mobile number is ceased to be assigned to the customer. The DNO will reject a porting request if the pre-paid SIM service is terminated.

The customer should produce the corresponding pre-paid SIM card for verification. In addition, the RNO may request the customer to produce the card holder certificate, if applicable. For record purpose, the RNO shall make a copy of the card holder certificate with the serial number on the card shown. If the card holder certificate is lost, the RNO must request the customer to declare the lost in MNP Application Form.

1. **Recommendations**

After analyzing the MNP mechanisms in the SATRC countries and in various countries across the globe, the following suggestions are made which can be considered for implementation by members of SATRC in their respective countries:

The regulations could seek to provide a framework governing all relevant aspects of MNP by –

* 1. laying down clear eligibility conditions for porting of mobile telephone numbers;
  2. defining rights and obligations of various stake holders, i.e., the customer, the Donor Operator, the Recipient Operator, the MNP provider;
  3. laying down the procedure to be followed by each player in the chain in processing number porting request;
  4. specifying clear time limits for completion of various steps by each player in the chain i.e. the Donor Operator, Recipient Operator and the MNP service provider; and
  5. envisaging least disruption of service to the consumer.

Salient features of the MNP under the regulations could be follows:

1. **Scope of MNP**

* MNP facility shall be available within licensed service area and across licensed service area also.
* Mobile Number Portability could include porting from one technology to another technology of the same service provider.

1. **Eligibility for porting**
   * + A subscriber holding a mobile number could be eligible to make a porting request only after 90 days of the date of activation of his mobile connection. If a number is already ported once, the number could become eligible for porting only after 90 days from the date of the previous porting. The rationale for specification of a minimum period is to enable the service provider to recover the customer acquisition cost.
     + The subscriber, who is under a subsisting contractual obligation having an exit clause with the Donor operator and has not complied with the exit clause cannot be allowed to port the number. Accordingly, provisions could be incorporated in the regulations.

* The subscriber making the porting request could be required to have cleared all the bills issued prior to the date of porting request. He shall give an undertaking that he has already paid all billed dues to the Donor Operator as on the date of the request for porting and that he shall pay dues to the Donor Operator pertaining to the mobile number till its eventual porting and that he understands and agrees that in event of non-payment of any such dues to the Donor Operator, the ported mobile number shall be liable to be disconnected by the Recipient Operator.
* Any extra procedure for the Donor Operator to recover his dues before porting takes place might complicate the procedure for number portability. Porting from an Operator is similar to disconnection for the purpose of recovery of dues. Therefore, only suitable provisions should be made in the regulations for recovering dues.

1. **Porting charges**
   * + The Subscriber who wishes to port his mobile number could approach the Recipient operator (the operator to whom the subscriber wants to port his number). The Subscriber could be required to pay porting charges, if any, to the Recipient Operator. Operators should be free to charge any amount less than or equal to the amount set by the telecom regulator.
     + Examination of the request involves work on the part of the Recipient Operator/MNP service provider. Besides, refund of porting charge also involves additional expenditure for the service providers. Therefore, there should be no provision for refund of porting charges paid to the Recipient Operator.
2. **Verification of subscriber by Recipient Operator and Authentication by Donor Operator**

* The request of the subscriber should not be rejected merely on account of change of address, difference in use of spelling in the name or address between the data given by the subscriber at the time of porting and that available with the Donor Operator, or non-availability of the original CAF details. In such cases, the probability of either rejection of subscriber’s request or delay in grant of clearance by the Donor Operator is very high. Moreover, the subscriber is only getting disconnected from the Donor Operator. Therefore, the Donor Operator needs only to confirm that the mobile number applying for porting belongs to its network. Additionally in order to implement the MNP successfully, the key aspect is to make the process simple, easy and speedy for the subscriber.
* Accordingly, the regulations could introduce a procedure wherein a Unique Porting Code (UPC)to be generated by Donor Operator for the authentication of the subscriber requested for porting of his mobile number. This UPC could be valid for 15 days. The subscriber will have to incorporate this code in the porting form while submitting it with the customer acquisition form to the Recipient Operator.

1. **Duration of No service period**

‘No Service Period’ should be set in such a manner so that no inconvenience is caused to the subscriber and adequate time is also available to carry out the disconnection/activation of the subscriber number. Therefore, the window period of two hour each for the disconnection and activation by the Donor operator and the Recipient operator respectively should be prescribed.

Also this activity should take place during the night time, so that it is not inconvenient to the customers.

1. **Withdrawal of porting request**

A subscriber could be able to withdraw his porting request within 24 hours of its submission to the Recipient Operator. But the porting charges shall not be refundable.

1. **Porting time period**

The regulations could envisage a maximum time period of seven working days for the completion of porting process.

1. **Financial disincentive in case of wrongful rejections and deviation in timelines in the MNP process**

* Wrongful rejections can be discouraged by levying financial disincentives on the concerned Donor Operator after verifying the correctness of rejection of porting requests on sample basis.
* For the purpose of verification of correctness of rejection of porting requests by the Donor Operator or compliance to the timelines, the telecom regulator may call for data from Access Providers or Mobile Number Portability Service providers or both from time to time. Based on the analysis of the data and supporting information provided by the MNP service providers and Access Providers, the telecom regulator shall levy financial disincentives on the concerned access provider

1. **Corporate Mobile Number Portability**

Need for Authorized signatory’s letter

To ensure genuineness of porting, a copy of the letter from authorized signatory’s could be sent by the Recipient Operator to Donor Operator along with other required details.

Limit on the number of mobile numbers in a corporate porting request

A limit of 50 mobile numbers with a corporate porting request could be prescribed so that probability of errors in feeding of large mobile numbers with UPCs by the Recipient Operator is reduced and at the same time sufficient numbers can be processed simultaneously with authorized signatory’s request.

**CHAPTER-VI: CURBING UNSOLICITED COMMERCIAL CALLS**

1. **Overview**

With the advent of technology, it is cheaper and easier than ever to market goods and services to consumers via the internet or through direct marketing phone calls. High teledensity accompanied by low tariffs create a great business opportunity for the marketing sector. The direct marketing industry generates huge amount of money in sales with a large number of people employed in the direct marketing. But there is also a growing problem with nuisance calls.

Nuisance calls are a scourge. At best they irritate consumers and at worst they can cause anxiety and fear. They undermine the reputation of the legitimate direct marketing industry.

Unsolicited Commercial Communications (UCC) is one of the major issues of public inconvenience. What makes the calls a nuisance for consumers is that the calls are unrequested and unwanted. The telephone consumers may face problem of unsolicited calls and short messages (SMS)/ multi-media messages (MMS) from direct sales agents (DSAs) and telemarketing agencies promoting business on behalf of various commercial and business organizations. The use of telephone is a personal and private affair of the subscriber and any unsolicited intervention is considered as intrusion of the subscriber’s privacy.

There are several key factors that have made the issue of nuisance calls particularly acute over the past few years:

* The expansion of the data industry, where through the internet and other means, the collection and sale of data has become a lucrative growth industry.
* The reduction in the cost of making calls and the development of new technology that enables organisations to make a large number of “live” unsolicited direct marketing calls or automated recorded message calls at little cost.
* Wider use of technology that enables the calling line identification (CLI) functionality to be readily ‘spoofed’, which is the practice of changing the telephone number that gets sent with the call, causing the telephone network to display a number to the consumer that is deliberately false or invalid, so that consumers do not know where the call came from. This practice also makes it more difficult to trace the caller in event that a complaint is received by regulators.
* The global nature of the communications networks means that calls can be routed through several countries before arriving in the home country, which makes them more difficult to trace quickly.

Online marketing provides vast opportunities for technology marketers to better understand prospective customers by collecting and sharing information from and about users. However, considering the public anguish over the issue and the urgent need for a comprehensive approach to tackle the problem of Unsolicited Commercial Communications, the telecom regulator of the country should put in place a robust framework to curb the menace of Unsolicited Commercial Communications. The two most common regulatory schemes are opt-out schemes, wherein customers may request to be removed from calling lists used by advertisers, and opt-in schemes, in which marketing calls can only be made to those users who have given their prior consent to receive such calls.

1. **Analysis of responses from SATRC countries**

In India, there are regulations to curb menace of unsolicited commercial communications/telemarketing calls. In Bangladesh, the regulator has issued directives for this purpose. Regulations on Anti-Spam, Obnoxious and Fraudulent activities exist in Pakistan also. In Afghanistan, there is an order for no establishment of telemarketing calls. In Sri Lanka, Nepal, Bhutan and Maldives, there is no regulation or framework specifically to curb the menace of unsolicited commercial communications/telemarketing calls.

The consumers who get affected by unsolicited commercial communications/telemarketing calls, in Nepal and Bhutan, can complain to the regulator. Maldives in the meantime is seeking for an interim solution for those customers who do not wish to receive unsolicited commercial communications/telemarketing calls. It has plans to address the complaint of this nature. In future it may implement ‘Do Not Disturb Register’ so that consumers who do not wish to receive UCC can register.

In India, there is a National Customer Preference Register (NCPR). A customer can opt to block all commercial communication or selectively block SMS from specified categories. These categories, are as listed below:

1. Banking/insurance/financial products/credit cards
2. Real Estate
3. Education
4. Health
5. Consumer goods and automobiles
6. Communication/ Broadcasting / Entertainment/IT and
7. Tourism and leisure

In Iran also, there is a National Customer Preference Register (NCPR) through which customer can opt to block all commercial communication in the form of SMS only. If the customer registers himself or herself for receiving this SMS, they are send but in case of no registration, all advertising SMS are blocked.

In other SATRC countries there is no such National Customer Preference Register (NCPR).

In India and Pakistan, telemarketers have to get registered with the telecom regulators and in Iran, the ministry of culture and Islamic guidance is responsible for contents of this telemarketers SMS. In India, telemarketers have to deposit Rs. 50,000 as the security deposit with the operator before taking telecom resources whereas in Pakistan no such security needs to be deposited. However, in Pakistan, for bulk SMS such persons need to identify and white-list their numbers.

In India, there are stringent penalty provisions for violation of the regulations with provision for recovery of penalty from the security deposit of the telemarketer. The penalty amount increase with the increase in violations. On the issue of first notice by the Originating Access Provider to the telemarketer for sending such unsolicited commercial communication, a sum of rupees twenty five thousand only (Rs. 25000/-) shall be deducted from the security deposit of the telemarketer and deposited in the account as may be specified by TRAI, from time to time. On the issue of second such notice, a sum of rupees seventy five thousand only (Rs. 75000/-) shall be deducted from the security deposit of the telemarketer. This penalty will reach a sum of rupees two lakh fifty thousand only (Rs. 250,000/-) for sixth such notice. Also, if the telemarketers violate the provisions of regulations six times then all their telecom resources will be disconnected and will be subsequently blacklisted for the next two years.

In India, there is a separate number series starting with ‘140’ for telemarketers for voice calls, which will facilitate easy identification of telemarketing voice calls. In Iran, such a separate number series exists for telemarketers for SMS only. In India and Bangladesh, there are separate headers for transactional and promotional messages to facilitate identification by consumers. In Pakistan, there are no such provisions.

In India, to ensure that normal telephone connections are not misused to send promotional messages, the limit imposed on the number of SMS per day per SIM is 100, after which SMS pack rate is not applicable. For every SMS sent beyond 100 SMS per day per SIM, customers have to pay minimum 50 paise per SMS. In Pakistan, maximum 200 SMS can be sent every 15 minutes.

In India, to prevent the telemarketers from dumping promotional SMSs which results in inconvenience to consumers as well as networks, a promotional SMS charge of Rs.0.05 is to be paid by the originating operator to the terminating operator.The Originating Access provider may collect the promotional SMS charge from the registered telemarketer.

In India and Bangladesh, the service providers have to ensure that any commercial communication including SMS, other than transactional messages, is sent only in certain time period of the day. In India, this time period is from 0900 hrs to 2100 hrs and in Bangladesh it is from 0900 hrs to 2000 hrs.

**Registration by consumers in to the “National Customer Preference Register (NCPR)”**

In India and Iran, a subscriber can register his preference or change of preference by making a call/SMS to a toll free number. It is based on all the approaches i.e. IVRS based, customer care executive based and SMS based. The customer care executive or IVRS confirm and register the preference of the customer in the Provider Customer Preference Register. In India, the customer is informed about the preference exercised by him through SMS with the unique registration number. In India, once the subscriber registers the preference, he would cease to receive commercial communications as per the preference(s) after a period of 7 days from the date of registration or change preference whereas this time period is 1 day in case of Iran.

**In case customer gets commercial communications even after registration**

In India, Iran and Pakistan, in case a subscriber receives unsolicited commercial communication after registration, then he can make the complaint to the service provider through both the methods – voice call and SMS, through a toll free number. In India, the complaint needs to be made within 3 days of receipt of such UCC. On registration of complaint, a unique complaint number will be communicated to the complainant by the operator. The action taken on the complaint will be informed to the complainant within 7 days.

1. **International Practices**

***United States***

Under the Telephone Consumer Protection Act, the FCC has rules in effect that address unsolicited telephone marketing calls – including those using automated and prerecorded messages. Under current FCC rules:

* Anyone making a telephone solicitation call to a home must provide his or her name, the name of the person or entity on whose behalf the call is being made, and a telephone number or address at which that person or entity can be contacted.
* Telephone solicitation calls to your home are prohibited before 8 am or after 9 pm.
* Telemarketers must comply immediately with any do-not-call request the consumer makes during a solicitation call.

In 2003, in an effort to increase consumer protection, the FCC helped establish the national Do-Not-Call list with the Federal Trade Commission (FTC).

The national Do-Not-Call list protects home voice or personal wireless phone numbers only.  Once the consumer has placed his home phone number or numbers, including any personal wireless phone numbers, on the national Do-Not-Call list, callers are prohibited from making telephone solicitations to those number(s).   His number(s) will remain on the list until the subscriber removes them or discontinue service – there is no need to re-register numbers.

The consumer can register his home phone number or wireless numbers on the national Do-Not-Call list by phone or by Internet at no cost.  The subscriber must call from the phone number he wishes to register.

Telemarketers have up to 31 days from the date that the consumer registers his telephone number to remove it from their call lists and stop calling him.

According to FCC, telephone solicitation is a telephone call that acts as an advertisement.  However, some phone solicitations are permissible under FCC rules, including: calls or messages placed with consumer’s prior permission, by or on behalf of a tax-exempt non-profit organization, or from a person or organization. However, having an established business relationship no longer meets the rules for permissible unsolicited calls to the consumer’s landline phone. Companies and telemarketers must have the consumer’s permission to call.

Additionally, many states now have statewide do-not-call lists for residents.  The consumers can contact their state’s public service commission or consumer protection office to see if their state has such a list, and to find out how to register their numbers.

If the consumer receives a telephone solicitation that he thinks violates any of the FCC rules, he can file a complaint with the FCC. The FCC can issue warning citations and impose fines against companies violating or suspected of violating the do-not-call rules, but does not award individual damages.

The consumers have multiple options for filing a complaint with the FCC:

* File a complaint online
* By phone
* By mail

***Australia***

The Do Not Call Register (DNCR) is an Australian Government initiative that gives Australians the opportunity to ‘opt out’ of receiving most telemarketing calls or marketing faxes.But putting the number on the Do Not Call Register will not stop scam calls to that phone number. ACMA recommends consumers to be vigilant when receiving any unsolicited phone calls to their number and if they suspect it is a scam simply hang up. Also, ACMA suggests consumers to protect their personal and financial details and never provide them to anyone calling their number they are not completely certain about. To report a scam call, consumer can go to the Australian Consumer & Competition Commission’s Scamwatch website or call on their number.

Under the DNCR Act, telemarketers and fax marketers must not call or fax registered numbers. Any business that calls or faxes a number on the register, or arranges for a call to be made or fax to be sent to a number on the register, may be in breach of the legislation and could face penalties. To avoid possible penalties, businesses planning to make telemarketing calls or send marketing faxes are able to check, or ‘wash’, their calling lists against the register. Businesses do this by submitting their lists to the Register Operator, through the Telemarketer Access Portal -a website for industry- or by posting in a CD-ROM. Lists are washed and returned to the businesses, with numbers they can, and cannot, call or fax identified. Businesses are not provided with any number they did not have.

The DNCR Act allows certain telemarketing calls and marketing faxes to be made, where the contact is authorised by an exempt organisation. These include contact authorised by:

* government bodies
* registered charities
* registered political parties, independent members of parliament and political candidates
* educational institutions, where the call or fax is made to a household where a current or former student lives or previously lived.

However, where the call or fax relates to goods or services, the exempt organisation must be the supplier or prospective supplier of those goods or services for the call or fax to be exempt.

There is a Telemarketing and Research Industry Standard 2007 that sets rules about when and how telemarketers can contact people. It includes requirements for:

1. when telemarketing and research calls cannot be made
2. information that must be provided during a telemarketing or research call
3. when calls must be terminated
4. the use of calling line identification.

The standard applies to any person or business intending to make telemarketing or research calls, regardless of whether they are exempt from the Do Not Call Register Act 2006 (the DNCR Act).

This means that even if a particular business, such as a charitable organisation, is exempt from the requirements of the DNCR Act and therefore able to call numbers listed on the Do Not Call Register, it must still meet the requirements contained in the standard.

Different rules can apply depending upon whether a call is a research call or other telemarketing call.In general:

1. a call is a research call if one of its purposes is to conduct opinion polling or standard questionnaire-based research
2. a call is a telemarketing call if one of its purposes is to offer to supply, or to advertise or promote, goods or services, or an interest in land, or a business or investment opportunity, or to advertise or promote a supplier of any of the above, or to solicit donations.

Where a call is for a ‘dual purpose’, in that it contains opinion polling or research elements, but also has a telemarketing component, then the call becomes a telemarketing call for the purposes of the DNCR Act and must not be made to a number on the register unless it is a designated telemarketing call.

***United Kingdom***

According to OFCOM, if someone rings the consumer trying to sell something, this is known as a live telesales call. Although companies and organisations are allowed to make live telesales calls, they cannot call the consumer if he has:

* told them previously that he does not want to receive telesales calls from them; or
* registered his number with the Telephone Preference Service (TPS) or Corporate Telephone Preference Service (CTPS), unless he has previously given a company permission to make marketing calls to him.

The law makes a distinction between live telesales calls (where there is a person on the line) and automated marketing calls when a recorded marketing message is played.

When someone makes a live telesales call to the consumer, the calling agent must supply him with the name of the caller and, if he asks for it, the address of the caller or a free telephone number. The consumer can use this information to notify the caller that he no longer wishes to receive live marketing or sales calls.

The consumer can notify the caller by telephone, email or letter. Once the caller has been notified, they should not make any live telesales calls to the number(s), the consumer has given them. In addition, consumer can register his landline or mobile number with the Telephone Preference Service (TPS).The TPS is a free service that allows consumers to record their preference not to receive any unsolicited telesales calls. Once registered with the TPS, the number(s) provided by consumer is added to an official list of numbers that **all** UK organisations (including charities, voluntary organisations and political parties) are prohibited from calling for sales and marketing purposes.

Although there are commercial organisations that offer services for reducing nuisance calls, the TPS list is the only official register for opting out of live telesales calls. The TPS register is established and supported by legislation and organisations which want to make live telesales calls are legally required to screen their sales lists against the TPS list only. The TPS and Ofcom are not affiliated with any commercial organisations that offer services to reduce nuisance calls. An equivalent service, the Corporate Telephone Preference Service (CTPS), is available for corporate bodies.

Registering with the TPS should reduce live telesales calls but it will not prevent all unwanted calls. Firms can still contact consumer to carry out market research even if consumer is registered with the TPS, although these calls must not be combined with any marketing or selling. Also, TPS registration does not work if consumer has previously given a firm permission to market to you by phone. The consumer can withdraw this consent by simply contacting the caller and informing them that he does not wish to be called for marketing purposes.

When the consumer registers his number(s) with the TPS/CTPS it takes up to 28 days for it to come into effect. If he is still getting calls after 28 days, he can complain to the TPS. He can do this online, by phone or in writing. The TPS will contact the caller in question asking for an explanation and requesting that it removes the number from its call lists. It also sends details of the complaints it receives to the Information Commissioner's Office (ICO).The ICO has powers to investigate and take action against anyone making marketing calls to consumers or corporate bodies registered with the TPS or CTPS.

Overseas firms who call on behalf of UK-based organisations should comply with UK law. This means that they should screen their call lists against the TPS register before making unsolicited sales and marketing calls.

When making a complaint, consumers should try to provide as much information as they can, including if possible:

* the organisation which made the call;
* the date and time of the call;
* the telephone number that made the call; and
* the nature of the sales/marketing that occurred during the call.

This information is valuable because it helps regulators to take more targeted action.

For up-to-date information and advice on the latest scams, the consumer should contact Action Fraud – the UK's national fraud reporting centre. However, if debit cards, online banking or cheques are involved in the scam, then the consumer’s first step should to contact his bank or credit card company.

One specific scam is the ‘missed call' scam. Victims receive a missed call from a number beginning 070 or 076.These numbers are used as they appear to be calls from a mobile phone number. However, when the victim tries to call the number back, the call is immediately dropped or an engaged tone is played and the victim is charged 50p for making the call. Ofcom recommends to the consumer that if he receives a missed call from a number beginning 070 or 076 that he does not recognise, do not call it back. Instead, make a note of the number and complain to the premium rate regulator, Phonepay Plus by phone, online or in writing.

1. **Recommendations**

After analyzing the regulations and framework to curb the menace of unsolicited commercial communications/telemarketing calls in the SATRC countries and in some other countries of the world, it can be concluded that the telecom regulator can come out with a number of technological, commercial solutions and financial disincentives to stop the menace of UCC. Therefore, following suggestions are made which can be considered for implementation by members of SATRC in their respective countries:

1. **Setting up a National Customer Preference Register (NCPR)**

The telecom regulator could set up a National Customer Preference Register (NCPR)where consumers desirous of not receiving any such messages or wanting to receive messages of only a particular category can register themselves. The customer should be able to make call/ send SMS for registration of preference or change of preference or deregistration on a toll free short code. Before sending promotional messages, regulator should require the telemarketers to ensure that these messages are not sent to consumers who are listed in the National Customer Preference Register (NCPR), and have opted not to receive such messages.

1. **Blocking of Bulk International Messages**

In many cases, it is found that spam messages are routed through servers located in different countries. Therefore, the telecom regulator could mandate that TSPs monitor and prevent the practice of circumventing telecom regulator’s spam control provisions by routing commercial SMSs through Internet servers located outside the country.

1. **Specific Phone Numbers for Telemarketing Calls**

* To give an option to the subscriber to receive or reject an incoming telemarketing call, the telecom regulator could mandate that all telemarketing calls be made only from phones with a distinct number series beginning.
* To check proliferation of UCCs from unregistered telemarketers who make calls or send messages from phones with normal number series, telecom regulator could mandate that TSPs implement technical solutions and ensure that commercial SMSs are never sent from an unregistered source or number.
* There could be separate headers for transactional and promotional messages to facilitate easy identification by consumers.

1. **UCC Complaint Redressal**

Telecom regulator could empower consumers with a simplified procedure to lodge UCC complaints. They should be able to provide details of an offending number to their service provider, by sending a text message or telephonically calling the common “short code number”. Service providers should also be required to promptly register such complaints online.

1. **Preventing Misuse of Bulk SMS Packs**

Some cheap SMS packs can be misused by unregistered telemarketers to send bulk SMSs. The telecom regulator could mandated that SMSs exceeding 100 per day shall be charged at a rate not less than 50 paise per SMS, i.e. no concessional rate can be provided by a TSP for more than 100 SMSs per day. This can discourage usage of bulk SMS packs for sending UCCs by unregistered telemarketers and curtail nuisance SMSs.

1. **Registration of Telemarketers and Rationalisation of Deposits and Fees**

Unregistered telemarketers are largely responsible for UCCs and spam SMSs. Recognising this, the telecom regulator could encourage registration of telemarketers by incentivising them to register and carry out their business legally. This could be done by setting a rationalized value for the initial deposit and registration fees and increasing the validity period of registration for authorised telemarketers.

1. **Stringent penalty provisions**

The regulator could make stringent penalty provisions for violation of regulations with provision for recovery of penalty from the security deposit of the telemarketer. This amount of penalty should keep on increasing with the number of contravention, in order to inculcate a greater sense of responsibility among the telemarketers.

1. **Disconnection of Telecom Resources and Blacklisting of Telemarketers**

* Once a complaint is received by a TSP about a UCC being made from an unauthorised source, the same is investigated and if found genuine, the UCC sending subscriber could be blacklisted. Further, all telecom resources allotted to such a sender could be disconnected and no telecom resource should be provided to such subscriber by any TSP for a period of two years.
* Even authorised telemarketers found to be violating the telecom regulator’s regulations should be blacklisted after 6 such recorded violations. As a strong penal measure, all telecom resources provided to such a telemarketer should also be disconnected.

1. **Disconnection of Telecom Resources of Organisations/ Entities on whose behalf the UCC is sent**

It is a common observation that a large number of UCC complaints received from consumers are calls or messages sent on behalf of banks, insurance companies, builders, and other such organisations. These organizations may appoint unregistered telemarketers on their behalf for sending the UCCs. Organisations marketing their products through retailers, distributors and franchisees are responsible for the acts of their agents. The telecom regulator could, therefore, issue a regulation to ensure that banks, insurance companies, real estate companies, and such other companies on whose behalf the telemarketing calls are being made are also liable to have their telecom resources disconnected. This will inculcate a greater sense of responsibility in these organisations.

**CONCLUSION**

A regulator’s mission is to ensure that the interests of consumers are protected and at the same time to nurture conditions for growth of telecommunications services in a manner and at a pace which enables the country to play a leading role in the emerging global information society. For achieving these objectives, the regulator should issue from time to time regulations, directions, orders or guidelines with focus on providing consumer with adequate protection, choice, affordable tariffs and high quality of service besides other areas.

This report covers some of the vital regulatory domains that should be addressed as a matter of priority to ensure that digital consumers are fully empowered and protected. These domains are complaint redressal, Quality of Service (QoS), billing accuracy, Mobile Number Portability (MNP) and Unwanted Commercial Communications (UCC). The consumer protection regulations put in place by some regulators around the world, have been studied to identify international best practices. The consumer protection measures of all the SATRC countries have also been analysed. It is observed that some SATRC countries have robust consumer protection regulations in place, circumventing these issues while some countries in the region have implemented consumer protection measures partially.

Therefore, this report can be used as a guide by the regulators of SATRC region while formulating the consumer protection framework that is fit for their respective countries.

**ANNEXURE – 1**

**Questionnaire**

1. Name of the Country/Administration
2. Is your administration responsible for protecting consumers’ interests in the Telecom sector?
   1. If no, please specify details of the concerned administration
3. What are the following key Telecom Services Performance Indicators for your country?
   1. Number of telecom operators - for both wireless and wired services. Please classify them further into private and public operators
   2. Number of subscribers - for both wireless and wired services
   3. Teledensity - for both wireless and wired services for rural and urban areas
   4. Monthly Average Revenue Per User (ARPU) for Access Services
   5. HHI (Herfindal-Hirschman index) - for both wireless and wired services
4. Does your country have Consumers Handbook on Telecommunications?
5. If yes, then please specify the languages in which it is available.
6. Does your country have registered consumer protection organizations in telecom sector? If yes, then
7. How many of them exist?
8. What is the method of interaction between consumer organizations and telecom regulator?
9. Do you conduct regional consumer education workshops?
10. If yes, then what is their frequency?
11. Are there any Regulations, Direction and Orders on consumer protection in telecom sector?
12. If yes, then please specify the areas it covers.
13. If not, then
14. Is there any roadmap prepared for protection of consumers in the telecom sector? Please provide details.
15. What are the major barriers being faced to implement a robust consumer protection mechanism?
16. Describe the most common complaints made by the customers of telecom sector in your country?

**COMPLAINT REDRESSAL**

1. Are there any Regulations, Direction and Orders on complaint redressal system? If yes, please provide details.

**Establishment of Complaint Centre**

1. Is the Telecom Service Provider (TSP) in your country mandated to have an established Complaint Centre? If yes, then
2. What are timings and days of operation of Complaint Centre?
3. Do the TSPs have a Consumer Care Number? Is it toll-free?
4. Can the consumer use a connection from any other service provider to contact the Complaint Centre, if his telephone/ mobile is faulty?
5. Which all languages does the customer care executive speak? (English/Local language etc)

**Handling of complaints at the Complaint Centre**

1. Is a ‘unique docket number’ allotted while registering the complaint?
2. Is there any time limit for resolution of the complaint?
3. If it is same for all service parameters, then please specify.
4. If it is not same for all service parameters, then please specify it for the following:
5. Basic Telephone Service (wireline):

|  |  |  |
| --- | --- | --- |
| S.No. | Service Parameter | Time Limit for redressal of complaint |
|  | Provision of Telephone |  |
|  | Fault Repair |  |
|  | Shift of Telephone Connection |  |
|  | Termination/ Closure of service |  |
|  | Resolution of billing/ charging complaints |  |
|  | Period of applying credit/waiver/adjustment |  |
|  | Time taken for refund of deposits after closure |  |

1. Cellular Mobile Telephone Service:

|  |  |  |
| --- | --- | --- |
| S.No. | Service Parameter | Time Limit for redressal of complaint |
|  | Resolution of billing/ charging complaints |  |
|  | Period of applying credit/waiver/adjustment to customer‘s account from the date of resolution of complaints |  |
|  | Termination/ Closure of service |  |
|  | Time taken for refund of deposits after closure |  |

1. Broadband Service:

|  |  |  |
| --- | --- | --- |
| S.No. | Service Parameter | Time Limit for redressal of complaint |
|  | Service Provisioning /Activation Time |  |
|  | Fault Repair / Restoration Time |  |
|  | Billing Performance (a) Percentage of Billing Complaints resolved. (b) Time taken for refund of deposits after closure |  |

1. If there are some additional service parameters which can be incorporated, then please specify them.
2. Does the Complaint Centre communicate the unique docket number along with date and time of registration and the time limit for resolution of the complaint through SMS to the consumer?
3. Is the consumer informed of the action taken to address the complaint through SMS?
4. For how long the details of complaint will remain in the system against each docket number?

**Handling of queries**

1. Is “General Information Number” established by all the service providers if in case a consumer needs certain information from the service provider?

**Operation of IVRS on Customer Care Number**

1. Does the Interactive Voice Response System (IVRS) at the “Consumer Care Number” operate in the prescribed multi step manner? If yes, then please specify the steps.
2. In how many steps does the consumer gets to speak to a customer care executive in the IVRS system?

**Appeal to Appellate Authority**

1. Is there any Appellate Authority which can be approached by a consumer for the redressal of complaint, if he is not satisfied? If yes, then
2. Are the contact details of the Appellate Authority available in :
3. the start-up kit
4. web site of the service providers and their sales outlets
5. Is there any fee or charge for filing an appeal? If yes, then what is the amount?
6. Can the appeal be filed through :
7. e-mail
8. fax
9. post
10. in person
11. What is the time limit prescribed for redressal of complaint by the appellate authority?
12. Can an appellant appear in person to present his case before the Appellate Authority?
13. Is there any Advisory Committee to the Appellate authority of the service provider in every service area? If yes, then who all are the constituent members of such advisory committees?
14. Is a unique appeal number assigned by the secretariat of the Appellate Authority during the registration of an appeal?
15. Is the acknowledgement of the appeal communicated to the consumer made through SMS or e-mail? What is the time limit for it?
16. Is a copy of the appeal forwarded to the service provider concerned for filing a reply? What is the time limit in which the service provider can file a reply?
17. Is the reply of the service provider along with the appeal, placed before the Advisory Committee for its consideration?
18. What is the time limit in which an Advisory Committee has to render its advice on every appeal placed before it?
19. What is the time limit in which the secretariat has to place the advice of the Advisory Committee before the Appellate Authority?
20. Whose responsibility is it to intimate the decision on the appeal to the appellant and the service provider? (For eg In India, this is the responsibility of secretariat of the Appellate Authority)

**Web based Complaint Monitoring System**

1. Are there any regulations that require the setting up of a Web based complaint monitoring system by the service provider through which the consumers can track their complaints? If yes, provide details of such application in your country.
2. Does your country have a Telecom Consumers Complaint Monitoring System to help the customer in processing their complaints?

**Telecom Consumers Charter**

1. Does your country have a telecom consumers charter? If yes, are all service providers required to publish a Telecom Consumers Charter in English and the local language of the service area? If yes, then does it have the following information?
2. Inter-alia terms and conditions of service
3. Information about complaint redressal mechanism, complaint redressal procedure
4. Different time frames specified by the authority for various complaints under QoS regulations
5. QoS parameters specified by the authority in respect of each of the service
6. Quality of service promised by the service providers
7. Amount to be deducted as administrative expenses or otherwise
8. Consumer care number
9. General information number
10. Various procedures related to services like mobile number portability, procedure for termination or disconnection of each service offered by the service provider
11. Right of the consumers under different regulations, orders issued by the authority
12. Duties and obligations of service providers under different regulations, orders and directions issued by the authority
13. Does the Start-up Kit, which a mobile customer gets at the time of his enrolment, contain an abridged version of the Telecom Consumers Charter containing salient features?

**Publication of information in Newspapers and website**

1. Are the service providers required to publish the following information in leading newspapers:
2. Customer Care Number
3. General Information Number
4. Contact details of the Appellate Authority
5. Procedure for monitoring of complaints on the web based complaint monitoring system
6. Is this information published in
7. English
8. local language
9. What is the frequency of publishing this information?
10. Do the service providers need to make the same information available on their web site also?
11. In your opinion, what additional measures can be incorporated for addressing the issue of “Complaint Redressal”? provide details

**QUALITY OF SERVICE**

1. Have you issued any Quality of Service regulations? If yes, then
2. Have you laid down the Quality of Service standards for
3. Basic and Cellular Mobile Telephone Services
4. Broadband service
5. Have you specified parameters on quality of service related to network outages and the benchmarks for meeting these parameters by the service providers? If yes, then are these any of the following (Please specify the benchmarks laid down by you for the corresponding parameters on quality of service ):
6. BTS accumulated downtime
7. Call set-up success rate
8. SDCCH/ Paging Chl. Congestion
9. TCH Congestion
10. Please specify any other parameters that can be incorporated
11. To ensure quality of service and to monitor the performance of service providers against the QoS parameters prescribed in the regulations, do you adopt any of the following strategies:
12. Performance Monitoring report from service providers. If yes, then what is their frequency?
13. Audit of QoS by third party agency. If yes, what is the frequency of audit of the network for quality of service for
14. mobile telephone service
15. basic service
16. broadband service
17. Survey of Customer satisfaction through third party agency. If yes, what is the frequency of this survey?
18. Please specify if any other strategies are adopted?
19. Do you obtain Point of Interconnection (POI) congestion reports on monthly basis from the service providers?
20. In your opinion, what additional measures can be incorporated for addressing the issue of “Quality of Service”? pl describe briefly.

**BILLING ACCURACY**

1. Have you prescribed a uniform code of practice for metering and billing accuracy in order to protect the interest of subscribers from inaccurate billing and charging?
2. Do the service providers have to arrange audit of their Metering and Billing System? If yes, then
3. What is the frequency of such audit?
4. Are the auditors empanelled by your organization?
5. Do the service providers need to furnish an audit certificate to your organization?
6. If yes, then what is the frequency and last date for its submission?
7. Is an Action Taken Report on inadequacies, if any, pointed out by the auditor in the audit report, submitted to your organization?
8. If yes, then what is the frequency and last date for its submission?
9. Is there any threshold for the tariff plans that are to be audited? (for eg in India, Tariff plans with 10% or more subscriber base are audited and it is mandatory to audit atleast three pre paid and post paid plans each which has maximum subscriber base).
10. If yes, then please specify it.
11. Are they audited on sample basis? If not, then please specify the method employed.
12. Has your organization issued a detailed checklist of audit for the implementation of metering and billing regulation which includes every item of the Code of Practice and the Terms of reference?
13. Does this audit cover the following :
14. checking of overbilling
15. checking of roaming charges levied on customers vis-à-vis the published tariff
16. checking of charging for value added services
17. verification of bill delivery process
18. verification of redressal of billing complaints and complaint handling process
19. activation time for recharges
20. Are the billing complaints received in your organization referred to the auditor for verification?
21. Are the systemic deficiencies observed during audit to be corrected in a time bound manner?
22. Has the audit of the metering and billing system helped in the reduction of incidences of billing complaints?
23. In your opinion, what additional measures should be incorporated for addressing the issue of “Billing Accuracy”? Please provide brief details.

**MOBILE NUMBER PORTABILITY (MNP)**

1. Is Full Number Portability implemented in your country? If yes, then please describe the the process in brief.
2. Describe the type of MNP implemented in your country
3. Is it allowed irrespective of the mobile technology (GSM/CDMA)?
4. Is it allowed only within in a licensed service area or across the licence areas as well?
5. Does a subscriber desirous of porting his mobile number needs to
6. Contact Recipient Operator (RO) to whom he wants to port his mobile number?
7. Obtain Customer Acquisition Form (CAF) & Porting Form from the R.O.?
8. Read the eligibility, permissible grounds for rejection of porting requests and other conditions carefully?
9. Obtain ‘Unique Porting Code’ (UPC) by sending SMS from the mobile number to be ported? If yes, then please specify
10. procedure for obtaining UPC
11. the validity of UPC
12. Submit the duly filled Porting Form and CAF along with documentary proof to the Recipient Operator.
13. A post paid subscriber should also submit a paid copy of the last bill along with Porting Form and CAF.
14. Obtain new SIM card from the Recipient Operator
15. What amount is charged in your country as porting charges to the consumer?

**Eligibility for porting**

1. What is the eligibility to make a porting request?
2. After how many days of activation of a mobile connection, can MNP be allowed?
3. If a mobile number is already ported once, can the number again be ported?
4. If yes, then after how many days from the date of the previous porting, is it allowed?
5. At the time of porting request, is a post paid subscriber required to submit an undertaking that he has already paid all the dues as per the last bill to the Donor Operator and that he/she would be bound to pay all the dues to the Donor Operator till its eventual porting?
6. Is a pre-paid subscriber, given an undertaking that he understands that at the time of porting the balance amount of talk time, if any, would lapse?

**Grounds for rejecting porting request**

1. Are there any conditions under which a Porting request can be rejected?
2. If yes, then are these any of the following:
3. If the outstanding payment is certain amount of money.
4. If yes, then please specify the amount of money.
5. If it has been made before the expiry of a period of certain days from the date of activation of a new connection.
6. If yes, then please specify the period of days.
7. If change of ownership of the mobile number is under process.
8. If the case related to the mobile number sought to be ported, is sub-judice.
9. If the mobile number sought to be ported has been prohibited by a Court of Law.
10. If the subscriber has applied for inter-service area porting.
11. If the unique porting code mentioned in the porting request does not match with the unique porting code allocated by the Donor Operator for the mobile number sought to be ported or validity of UPC has expired.
12. On the ground of subsisting contractual obligations, with some exceptions.
13. Please specify the exceptions, if any.
14. Any other ground for rejection for porting?

**Withdrawal of a porting request**

1. Is there a provision for withdrawing the porting request? If yes, then
2. What is the time limit in which a subscriber may withdraw his porting request?
3. How is the recipient operator informed about it?
4. Is there any obligation on the service provider to refund the porting charges paid?

**Porting time**

1. What is the maximum time period for the completion of porting process?
2. Are there any exceptions? If yes, please specify them.

**Activation of ported number**

1. Does the Recipient Operator intimate the date & time of porting to subscriber?
2. Is there any service disruption time?
3. If yes, please specify its duration?
4. In your opinion, what additional measures should be incorporated for addressing the issue of “Mobile Number Portability”?

**CURBING UNWANTED COMMERCIAL COMMUNICATIONS (UCC)**

1. Is there any regulations/framework to curb menace of unsolicited commercial communications/telemarketing calls?
2. Is there a provision to complaint against a scam call/SMS? If yes, please provide details.
3. Is there a provision to notify the caller that you no longer wish to receive live marketing or sales calls? If yes, please provide details.
4. Is there any National Do Not Call Registry (NDNC)? If yes, then
5. Can a customer opt to block all commercial communication through this Register?
6. Can a customer opt to selectively block SMS from specified categories?
7. If yes, then are these categories, any of the ones listed below: Banking/insurance/financial products/credit cards
8. Real Estate
9. Education
10. Health
11. Consumer goods and automobiles
12. Communication/ Broadcasting / Entertainment/IT and
13. Tourism and leisure
    1. If in case you have some more categories, please specify them.
14. Is it mandatory for the telemarketers to register with the regulator/ or any other organisation? In case of other organization, please specify.
15. If yes, then do they have to deposit certain security deposit with the operator before taking telecom resources?
16. If yes, then please specify the amount of security deposit?
17. Are there any penalty provisions for violation of the regulations?
18. If yes, then does it have a provision for recovery of penalty from the security deposit?
19. Does the penalty amount increase with the increase in violations?
20. If yes, then does the telemarketer have to deposit additional security deposit on consequent violations?
21. If yes, then specify the amount.
22. Is there any provision for disconnecting the telecom resources after certain violations? If yes, then
23. Specify the number of violations
24. Is there subsequent blacklisting that takes place for the telemarketer?
25. If yes, then what is the duration for which the telemarketer is blacklisted?
26. Do you have separate number series for telemarketers for voice calls?
27. If yes, please specify.
28. Are there any separate headers for transactional and promotional messages to facilitate identification by consumers?
29. Are there any restrictions for sending of SMS in excess of certain number to ensure that normal telephone connections are not misused to send promotional messages? If yes, then
30. Please specify it for both postpaid and prepaid connections.
31. Is there any promotional SMS charge to be paid by the originating operator to the terminating operator?
32. Is there any time period during which any commercial communication including SMS, other than transactional messages can be sent?

**Registration by consumers in to the “ Do Not Disturb Register”**

1. Can a subscriber register his preference or change of preference by making a call/SMS?
2. If yes, then is it a toll free number?
3. Is it IVRS based or customer care executive based or SMS based or both?
4. Does the IVRS or customer care executive confirm exercise of preference of the customer?
5. Is the customer informed of his registration of preference and the unique registration number?
6. If yes, then is it through SMS or by other means? Please specify, if it is by other means?
7. After how many days would a customer cease to receive commercial communications from the date of registration or change preference?

**In case customer gets commercial communications even after registration**

1. Can a subscriber make a complaint to the service provider in case a subscriber receives unsolicited commercial communication after registration? If yes, then
2. Can the customer make the complaint through voice call or SMS or both?
3. Is it a toll free number?
4. Is there any time limit in which this complaint needs to be made, after receipt of such UCC?
5. If yes, then please specify.
6. Is a unique complaint number communicated to the complainant by the operator on registration of complaint?
7. Is the time limit in which the action taken on the complaint will be informed to the complainant?
8. If yes, then please specify.
9. In your opinion, what additional measures should be incorporated for addressing the issue of “Curbing Unwanted Commercial Communications (UCC)”? Please provide a brief write up on proposed measures.

1. http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/general-conditions/customer-code-practice/ [↑](#footnote-ref-1)
2. http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/complaints-handling-code.pdf [↑](#footnote-ref-2)
3. <http://www.skmm.gov.my/skmmgovmy/media/General/pdf/IPR2014_English.pdf> [↑](#footnote-ref-3)
4. <http://www.acma.gov.au/Citizen/Take-action/Complaints/Telco-complaints/phone-service-complaints> [↑](#footnote-ref-4)
5. <http://stakeholders.ofcom.org.uk/binaries/consultations/topcomm/statement/plain_Eng.pdf> [↑](#footnote-ref-5)
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15. <http://archive.acma.gov.au/webwr/telcomm/industry_codes/codes/c518_2006.pdf> [↑](#footnote-ref-15)
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17. <http://www.ofca.gov.hk/filemanager/ofca/en/content_405/hkta3104.pdf> [↑](#footnote-ref-17)
18. sum of the values [↑](#footnote-ref-18)
19. <http://www.skmm.gov.my/skmmgovmy/files/attachments/FAQs_MNP.pdf> [↑](#footnote-ref-19)
20. <https://www.fcc.gov/encyclopedia/wireless-local-number-portability-wlnp#howmuch> [↑](#footnote-ref-20)
21. <http://www.ofca.gov.hk/filemanager/ofca/common/Industry/telecom/mnp_procedures.pdf> [↑](#footnote-ref-21)