Consultation Paper

on

Regulatory Principles of Tariff Assessment

New Delhi, 17th February, 2017

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Stakeholders are requested to furnish their written comments by 17th March 2017 and counter-comments by 24th March 2017 to Shri Kaushal Kishore, Advisor (F&EA-II), TRAI. Comments and counter-comments would be posted on TRAI’s website www.trai.gov.in. The comments and counter-comments may also be sent by e-mail to advfea1@trai.gov.in. For any clarification/information, Advisor (F&EA-II) may be contacted at Tel./Fax No. : +91-11-23234367.
## Contents

<table>
<thead>
<tr>
<th>Chapter No.</th>
<th>Item</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction</td>
<td>1-5</td>
</tr>
<tr>
<td>2.</td>
<td>Transparency in Tariff offers</td>
<td>6-15</td>
</tr>
<tr>
<td>3.</td>
<td>Anti-Competitive behaviour in Tariff Offers</td>
<td>16-28</td>
</tr>
<tr>
<td>4.</td>
<td>Issues for Consultation</td>
<td>29-30</td>
</tr>
<tr>
<td></td>
<td>List of Acronyms</td>
<td>31-32</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

1.1 The Telecom Regulatory Authority of India (TRAI) has, *inter-alia*, the mandate to regulate tariff for telecommunication services in India. Section 11(2) of the Chapter III of the Telecom Regulatory Authority of India Act, 1997 lays down that:

"(2) Notwithstanding anything contained in the Indian Telegraph Act, 1885 (13 of 1885), the Authority may, from time to time, by order, notify in the Official Gazette the rates at which the telecommunication services within India and outside India shall be provided under this Act including the rates at which messages shall be transmitted to any country outside India:

Provided that the Authority may notify different rates for different persons or class of persons for similar telecommunication services and where different rates are fixed as aforesaid the Authority shall record the reason therefor."

1.2 In exercise of this power, Telecommunication Tariff Order (TTO), 1999 was notified for the first time on 9th March, 1999. Amendments to the TTO, 1999 have been made from time to time to reflect the evolving telecommunication landscape. As a result, the TTO itself has since been amended sixty two times as on date to reflect the developments in the sector.

1.3 In addition to the TTO, various regulations, directions and advisories have been issued by TRAI to meet the regulatory requirements. For example, the Telecom Consumer Protection Regulations (TCPR), 2012 defines the features of various prepaid products and also addresses transparency issues.

1.4 In the last 18 years since the TTO was first notified, the telecommunication sector in India has witnessed a number of changes in the telecom ecosystem
i.r.o of technologies deployed, types of telecom services, market composition, competition, user profile and usage pattern. The main highlights of the TTO are:

i. **Limits on Tariff**: Provision of ceiling and floor on certain telecommunication services.

ii. **Reporting Requirement**: TSPs have to report to TRAI any new tariff and the subsequent changes.

iii. **Transparency and Consumer Protection**: Tariff charged along with the terms and conditions attached to it by the TSPs should be published in a manner as prescribed by TRAI from time to time.

**Regulation of Tariff: From Fixation to Forbearance**

1.5 The definition of tariff given in the TTO refers to the *rates and related conditions* at which telecommunication services are offered. Initially from ‘Fixation of tariff rates’, TRAI has moved, over the years, to ‘Forbearance with prior Approval stage’ and finally to a ‘Forbearance regime with post-facto reporting obligation’ with regulatory oversight. Currently, except for the tariffs for national roaming, fixed rural telephony and leased lines, tariffs for other telecommunication service are under forbearance. In accordance with the policy of ‘light-touch’ regulation being followed, the tariff framework gives the TSPs, which include Internet Service Providers (hereinafter collectively referred to as TSPs) the freedom to design the tariffs according to the prevailing market conditions. This has resulted in emergence of new and innovative products in the market that are designed to provide telecom services at affordable and competitive price to the consumers.

**Regulatory principles governing tariff**

1.6 Notwithstanding the extant principle of forbearance, regulatory oversight over tariff is required to ensure the observance of regulatory principles. Accordingly, TRAI regularly monitors tariffs prevalent in the market to ensure
their consistency with the regulatory principles. Through the 30th (thirtieth) amendment to the TTO issued in 2004, TRAI revised the "reporting requirement" to be followed by a TSP in respect of any new tariff launched by it and amendments therein. As per this, a TSP is required to report the details of each tariff to TRAI within seven days of its implementation, after conducting a self-check to ensure that the tariff plan(s) is/are consistent with the regulatory principles in all respects which, inter-alia, include Interconnection Usage Charges (IUC) Compliance, Non-discrimination & Non-predation.

1.7 A TSP has the flexibility to decide various tariff components for different service areas of their operation subject to the reporting requirement and adherence to other regulatory guidelines in vogue. Flexibility given to the TSPs by tariff forbearance is a core feature of current tariff framework. At the same time, several regulatory principles have been laid down to ensure protection of consumer interest and orderly growth of the sector. Forbearance and the flexibility in respect of tariff are, however, not unbridled and come with an obligation on TSPs to ensure adherence to regulatory framework. The primary responsibility to ensure consistency of tariff with the regulatory principles, directions and guidelines now rests with the TSPs. The tariff filing provision plays a critical role in this regard, enabling TRAI to monitor the prevalent tariffs and effectively intervene, wherever required.

1.8 In the year 1999 when the TTO framework was put in place, the telecom sector was primarily voice centric. However, in the recent past, there has been a shift from voice to data, driven by technological and other factors like change in user profile, proliferation of social media, development of innovative content and applications, falling cost of devices etc. Following are some of the factors that underscore the need for a comprehensive review:

(i) The TTO was issued in the year 1999, when the telecom sector
consisted mainly of fixed-line services and was dominated by Government operators – DoT (subsequently BSNL) and MTNL. Though in the last 17 years, TRAI has carried out sixty-two amendments in the Principal TTO to keep up with the changed circumstances, it is felt that a comprehensive review of the TTO is required to adequately address the changes in the sector. This review is also apt in the light of the meeting held with the CEOs of the TSPs on 6th January 2017 to discuss the annual calendar of activities of TRAI for the year 2017, which, inter-alia, included developing a new framework for tariffs in evolving telecommunication sector and on which there was a consensus.

(ii) The trend towards convergence of services too calls for a comprehensive regulatory framework that supports seamless delivery of converged services in a technology neutral environment. The trend towards convergence has also resulted in parallel, but related, shifts in pricing strategies, in particular, the growing prevalence of bundled tariffs. For example, converged services like triple-play offerings (video, voice and data) are often accompanied by a bundled pricing approach. Initially, telecom services predominantly meant delivery of voice through telecom network. In the recent past, offer of bundled services – voice and data – have become the main feature of tariff offerings by the TSPs. Bundled services are offered through composite tariff offer. For examination of a tariff offer with reference to compliance of various regulatory principles, it is essential to assign prices for different components of the bundled services viz. voice, data, SMS, etc. In the current framework, it is not easy to apportion the price of each component of the tariff offers.

(iii) There are certain principles that have been explicitly defined in the TTO, like the term “non-discrimination”, which is one of the key regulatory tariff principles. Clause 2(k)) of the TTO defines it as, "k.
'Non-discrimination’ means that service providers shall not, in the matter of application of tariffs, discriminate between subscribers of the same class and such classification of subscribers shall not be arbitrary”. However, there are certain other terms like ‘transparency’, ‘non-predation’, which require further elaboration in the context of retail tariff.

1.9 While periodic amendments have been made to the TTO (sixty-two so far) and other regulations in response to market developments, the above discussion provide a rationale to initiate a review of the current tariff framework, albeit, in a phased manner, starting with a discussion on the core regulatory principles enshrined in the TTO, TCPR, Directions and Advisories issued by TRAI from time to time. Pursuant to the above, the Authority finds it necessary to initiate a consultation process on some of the extant regulatory principles and if required to bring about necessary modifications wherever required.

1.10 In this background, the following chapters present an analysis of the issues and raises questions for consultation.
Chapter 2

Transparency in Tariff offers

2.1 Transparency in tariff is and has been prime issue of concern for the Authority. The Authority has issued several directions and guidelines in order to ensure transparency in tariff offers to protect the interests of the consumers of telecommunications services. However, despite various measures taken by the Authority to ensure transparency in tariffs, the Authority has been receiving complaints from consumers and consumer organizations highlighting, *inter-alia*, issues concerning transparency in the tariff offers of TSPs. Common to all these feedbacks is the feeling amongst the consumers that the various tariff offers being made by the TSPs are difficult to comprehend & lack transparency.

2.2 Some of the important provisions in the TTO, TCPR 2012, Directions and advisories to enhance transparency in provision of telecommunication services are mentioned below.

Cap on Tariff Plans on Offer

- The number of tariff plans that can be offered by an access provider in each licensed service area at any given point of time is subject to a cap of 25 plans by virtue of the provisions of 21st amendment to TTO which specifies that "At any given point of time not more than 25 plans shall be on offer by a service provider. This includes both postpaid and pre-paid tariff plans. The cap on the number of tariff plans has been prescribed on the premise that too many tariff plans on offer would confuse the consumer and make it difficult for consumers to make an informed choice.

Protection to consumers against hike in tariffs

- The 43rd amendment to the TTO seeks to prevent too frequent changes in the tariff plans to the consumers and assures tariff stability for a minimum period of six months after enrolment into a tariff plan. This TTO states,
“A tariff plan once offered by an Access Provider shall be available to a subscriber for a minimum period of SIX MONTHS from the date of enrolment of the subscriber to that tariff plan. However, any tariff plan presented, marketed or offered as valid for any prescribed period exceeding six months or as having lifetime or unlimited validity in lieu of an upfront payment shall continue to be available to the subscriber for the duration of the period as subscribed in the plan and in the case of lifetime or unlimited validity plans, as long as the service provider is permitted to provide such telecom service under the current license or renewed license. In the case of plans with lifetime or unlimited validity, the service provider shall also inform the subscribers of the month and the year of expiry of his current license”.

Additional Transparency measures

- TRAI Direction dated 1st September, 2008, and 48th Amendment to TTO notified on 1st September, 2008 mandate several transparency measures including the following:-
  (i) Tariff information to be provided in vernacular language also.
  (ii) Blackout days (customary/festival days on which free/concessional calls/SMS are not available) restricted to a maximum of 5 days in a calendar year. Such days to be pre-specified and no subsequent alteration or addition is permitted.
  (iii) Straight tariff reductions are to be passed on to consumers without any precondition.
  (iv) The service providers shall not insist on recharge between periods lesser than six months in lifetime plans for remaining connected during the promised lifetime validity period.

Telecom Consumer Protection Regulations

2.3 TRAI issued Telecom Consumer Protection Regulation on 06.01.2012 with a view to streamline tariff offers and enhances transparency in the provision of
service for prepaid subscribers. The main features of the Regulation as amended from time to time, are:

(i) Categorization of vouchers as – Plan Vouchers (PVs), Top Up vouchers, Special Tariff Vouchers (STVs) and Combo Vouchers (CVs)– with colour bands for easy identification.

(ii) Minimum Font size for printed matter on physical vouchers - not less than 8 Pt.

(iii) Providing usage details to pre-paid subscribers after every call/data usage.

(iv) Itemized post usage of account shall be provided at a reasonable cost not exceeding Rs.50/-.

(v) Providing information to pre-paid subscribers on activation of plan/top-up/ST vouchers.

(vi) Improved transparency in provision of Premium Rate Services by prior information about charges.

Direction on publication of Tariff plans

2.4 TRAI has issued a Direction on publication of Tariff plans on 16th Jan 2012. to facilitates the subscribers to choose plans that suit individual requirement best. Service providers are required to publish all tariff plans in a service area for prepaid and postpaid subscribers in the prescribed format in one regional and one English newspaper at an interval not more than six months. Full details are to be made available at Customer Care Centre, Point of Sale (PoS), and website in the given format with a view to facilitate easy and transparent comparison.

Direction on preventing misleading advertisements

2.5 TRAI has issued a Direction on preventing misleading advertisements on 26.03.2012. This Direction is intended to improve transparency in telecom tariff advertisements and facilitate the subscribers to choose a plan that best suits an individual requirement. It has been mandated that tariff advertisements published by service providers are transparent, not misleading
and unambiguous, disclose all material information in an unambiguous manner, and contain the website address and customer-care number of the TSPs.

The TSPs have to maintain an advertisement register which must include a copy of every tariff related advertisements, and carry out internal audit to ensure that they are complying with all aspects of this Direction.

2.6 TRAI has taken a number of regulatory measures to ensure transparency to the consumers. However, still a number of complaints are received regarding tariff offers made by the TSPs as not being adequately transparent. A few examples are given below:

(i) Sometime TSPs offer either free SMS or SMS at a discounted rate without explicitly informing the consumer that there is an associated fixed cost for availing these offers.

(ii) This practice has also been noticed in case of free roaming offered by TSPs when they do not disclose time period for which free roaming is being offered and also the associated fixed cost to avail the free roaming facility.

(iii) TSPs in number of cases offer free minutes or free SMS without informing explicitly to the consumer that these minutes and SMS are meant to be used only on their own network.

(iv) Use of term ‘free’ in the advertising campaigns without mentioning the corresponding upfront/recurring charges to be incurred by the consumer.

(v) As mentioned earlier, data services have become popular and form a substantial portion of the customers’ expense. However, a number of complaints on the excess charging are also received. While conveying the tariff for data, the underlying conditions like usage in the night are either not revealed or are given in fine-print. In the case of data services, fair usage policy with regard to reduction of speed is also not disclosed to the consumers in clear terms.

(vi) While advertising data offers, TSPs mention the latest technology
coverage that a consumer would experience. However, in reality the current networks are a combination of 2G/3G/4G technologies and consumers experience the benefit of latest technology in patches only. This leads to consumer dissatisfaction. Therefore, it has to be conveyed clearly to the consumer that the coverage would be subject to availability of the network.

**Information Remedies**

2.7 Different countries have undertaken various measures to inform the consumer about tariff offerings in a transparent manner. OfCom of UK has done a study on Information Remedies (refer Box 1 below). Others like South Africa publish a benchmarking report illustrating the pricing of various tariff offers by major telecom service providers to their consumers. The benchmarking report utilizes OECD methodology to develop standardized usage profiles.
Box No.1: Information remedies by OfCom

A recent study\(^1\) on Information Remedies done by the UK regulator OfCom provides us with useful categories on which to evaluate information provision being made by the service providers:

(i) Awareness: are consumers aware of the information?
(ii) Accessible: is the information easy to access, find and use? Is it clearly identifiable?
(iii) Trustworthy: is the source of information trustworthy and totally impartial? Has the information been endorsed by multiple stakeholders?
(iv) Accurate: is it true to a sufficient level of resolution, up to date and can it be checked for correctness?
(v) Comparable: is it presented in such a way by various providers to allow for easy and sensible comparisons?
(vi) Clear and understandable: is the information expressed in units, concepts or terminology that is unambiguous an easy to understand? Do consumers have the technical competence or cognitive ability to understand it?
(vii) Timely: is the information readily available at the point of making decision?

Non-discrimination

2.8 Clause 2(k)) of the TTO defines Non-discrimination as,

"k. ‘Non-discrimination’ means that service providers shall not, in the matter of application of tariffs, discriminate between subscribers of the same class and such classification of subscribers shall not be arbitrary”.

2.9 This is an obligation cast on a TSP that while offering retail tariffs to the consumers; it shall ensure that they are not discriminatory. However, the issue which arises in the examination of non-discrimination is: what is fair and

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non-arbitrary classification? For example, a number of tariff plans are issued where the TSP provides special rates/facilities to new subscribers. One can argue that new subscriber is a valid classification. However, since these special rates are not available to the existing subscribers, it can also be termed as discriminatory. It has also been observed of late that tariff offers are also being linked to the use of handsets compatible to a particular technology/make.

2.10 In view of the above discussion, the following issues emerge for consultation:

**Question 1:** Do you think that the measures prescribed currently are adequate to ensure transparency in the tariff offers made by TSPs? If not, then, what additional measures should be prescribed by the TRAI in this regard? Kindly support your response with justification.

**Question 2:** Whether current definition relating to “non-discrimination” is adequate? If no, then please suggest additional measures/features to ensure “non-discrimination”.

**Issues related to Promotional Offer**

2.11 Apart from regular Tariff offers that are launched by the various TSPs, ‘promotional offers’ are given to customers with a view to incentivize their subscription and increase the subscriber base. These are different from the tariff offers itself and are in the nature of benefits available to customers for a limited period of time.

2.12 The concept of “promotional Offer” was first addressed by TRAI on 19th June 2002 through an advisory issued to all telecom service providers wherein TRAI *advised service providers to restrict the validity of promotional packages and/or the benefits offered to customers under such packages on offer to a maximum of 90 days from the date of launch.* This letter was issued in the context of TSPs offering promotional packages to their customers as a marketing strategy where the validity of such schemes ranged from 15 days
to 11 months. The Authority considered the implications of offering such concessions to customers and was of the view that *too long a promotional period dilutes the promotional character of the tariff plan and in fact makes it a regular plan*. The letter, however, did not spell out the meaning of the term "promotional package".

2.13 The Authority subsequently referred to this issue in its **Consultation paper on limiting the number of tariff plans offered by the access providers** (March 8, 2004) but did not clarify the meaning of the term promotional offers. However, it listed the following as examples of the kind of promotions being offered by operators - rebate in rental, reduced STD/ISD charges, free SMS, free pulses/talk time, free Internet access, free gifts, and eligibility to win prizes either in the form of additional benefits in terms of talk time or prizes from other industries.

2.14 Elaborating further on this issue in the Consultation Paper, the Authority noted in Paragraph 4.7 that *service providers that are part of business houses with interest in multiple sectors and vertically integrated operators can even use the provision of promotional scheme in an unfair and anti-competitive manner. On the other hand, it could be argued that promotional offers are beneficial to the consumers and be allowed without any restrictions*. The Authority opined that in view of the tendency of promotional offers to confuse consumers, *it would appear to be reasonable to mandate that there would be no promotional tariff plans as such, instead, the service providers could offer standard discount rate on their tariff on occasions that suit the service providers, without affecting the basic structure of their tariff plans on offer*. Against this background, the Consultation Paper posed the following question - *Should promotional plans offers be made as a standard discount offer?*

2.15 The Authority once again took up the issue of promotional offers in its
Consultation paper on Issues arising out of Plethora of Tariff Offers in Access Service Provision (January 29, 2008). Paragraphs 3.8 and 3.9 of this Consultation Paper stated as follows:

Another problem that was discussed in the earlier consultation process was the prolificacy of tariff plans that were offered in the nature of promotional plans/offers. This issue is still very much relevant and the number of promotional offers has been on the rise constantly with the increased competitive activities witnessed by the market. The marketing strategies adopted by various operators to augment /retain their customer base, to encourage network usage, to achieve specific revenue targets etc are making the nature and scope of such offers further complex. The segmentation of customer base is resorted to based on large number of criteria for the purpose of offering such schemes. Such criteria vary from usage profile, loyalty, to customary/religious days to non-descript occasions...

...This viewpoint also suggests that some sort of regulatory guidelines may be necessary to regulate the provision of promotional offers to ensure that the customers are able to understand the schemes better to make a conscious decision easy for them.

2.16 In the Consultation Paper, TRAI also noted that there are generally two kinds of promotional tariffs:

(i) Where both the offer as well as the promotional benefit so available for the customer is valid for a limited period.

(ii) Where the offer may be valid for a period limited to 90 days but the benefits available to the customers may exceed 90 days and can even be indefinite, just like a regular tariff offer. For example a full fledged tariff plan offered for subscription for a few days.

2.17 In the context of the second category of promotional tariff plans, TRAI raised the issue of whether such plans that are offered for subscription for a limited period but available for the customer as a regular plan should also be counted
as tariff plans for the purpose of application of the cap of 25 plans. Further, the Authority, once again, posed the question on whether there was a need to regulate or restrict promotional offers and if so, what should be the measures.

2.18 Following this consultation process, the Authority issued a Direction to all Access Service Providers regarding transparency in tariff offers) (September 1, 2008). In Part II of the direction, it directed that while publishing their promotional offers to the public, operators should specify:
(i) the eligibility criteria for such promotional offer; and
(ii) the opening and closing dates of such promotional offer (within the existing limit of ninety days).

2.19 From the above discussion, it can be deduced that though the concept of ‘promotional offer’ is in vogue since last 15 years, unlike regular tariff plans, its features are not that well defined. The prevalent guidelines on the promotional offers are limited to only the eligibility condition and the opening and closing dates of such offers. They are however, silent on issues like: number of promotional offers that can run concurrently or that can be offered in a calendar year; repetition of offers; benefits that can be offered etc. Some may argue that there is no rationale for special dispensation for promotional offers and it could be offered as standard discount rate on a regular plan without affecting the basic structure of their tariff plan. In view of the discussion, the following issues emerge for consultation:

Question 3: Which tariff offers should qualify as promotional offers?
What should be the features of a promotional offer? Is there a need to restrict the number of promotional offers that can be launched by a TSP, in a calendar year, one after another and/or concurrently?
CHAPTER 3

Anti-competitive behaviour in Tariff Offers

3.1 The mandate of TRAI being to ensure the orderly growth of the telecommunication sector in the country, enjoins upon it the responsibility to prevent anti-competitive conduct in the context of interconnection and tariff setting. The Authority has in its previous consultations on tariff and interconnection, repeatedly highlighted the concerns associated with anti-competitive conduct in telecommunications. However, in the changing ecosystem the Authority believes that there is a need to undertake a comprehensive review of the potential anti-competitive practices that could harm the sector and its consumers; set out clearly defined standards of competitive conduct; and explore appropriate regulatory tools to address such concerns. The anti-competitive behavior in the context of tariff setting can be through predatory pricing by the dominant market player.

3.2 While the term "non-predation" has not been specifically defined in the TTO, it finds reference in many documents issued by TRAI from time to time, which indicates its usage in the context of its generally understood meaning of abuse of dominant position by an enterprise through predatory pricing. For instance, the explanatory memorandum to the TTO twenty third amendment (2002) states as follows:

"Authority will continue to monitor the tariffs both with respect to predatory tariffs as well as unduly high tariffs because operators with dominant market presence and operations in more than one service sector will always have the capacity to do so".

3.3 Similarly, in the Consultation paper on Tariff plans with Lifetime validity issued in January, 2006, TRAI noted that predatory pricing generally refers to a situation where a dominant firm (with Significant Market Power) charges low
prices over a sufficiently long period, so as to drive competitors out of market or deter new entrants, and then raises the prices to recoup its losses.

**Extant TRAI approach on concept of dominance**

3.4 The concept of dominance finds concrete expression in the term Significant Market Power (SMP) in IUC regulations\(^2\) issued by TRAI. The Authority in the definition of "Significant Market Power (SMP)" given under the Interconnection Usage Charges Regulations, 2003 (2 of 2003) has defined SMP as:

"A Service Provider holding a share of at least 30% of total activity in a licensed telecommunication service area. These services are categorised as Basic Service, Cellular Mobile Service, National Long Distance Service and International Long Distance Service". Where "Activity" would mean and include any one or more of the following: (a) Subscriber base; (b) Turnover; (c) Switching Capacity and (d) Traffic Volume".

3.5 The Authority in its recommendation dated 28.08.2007 on “Review of license terms and conditions and capping of number of access providers”, dealt with the concept of market definition in the context of Merger, Acquisition and Transfer. In the specific context, it had concluded that "the relevant services market be defined as wireline and wireless as services. Wireless service market shall include fixed wireless as well". With regard to the relevant geographic market, the Authority recommended that the market be defined as the respective licensed service area.

3.6 A more granular categorization is reflected in TTO, which identifies the following services - Basic Services (Other than Integrated Services Digital Network (ISDN), Cellular Mobile Telecom Service, Radio Paging Services, Domestic Leased Circuits, ISDN Services, Internet, Value Added Services, Telex and Telegraph Services, and Global Mobile Personal Communication by

\(^2\) The Telecommunication Interconnection Usage Charges Regulation, 2003 (2 of 2003)
Satellite. However, this categorization was for the purpose of specifying tariff in the schedules to TTO.

**Meaning of predatory pricing**

3.7 The Competition Act defines predatory pricing as “the sale of goods or provision of services, at a price which is below the cost, as may be determined by regulations, of production of the goods or provision of services, with a view to reduce competition or eliminate the competitors”. (Explanation (b) to Section 4, Competition Act, 2002)

3.8 Steps that are followed in assessment of predatory pricing are:

(i) delineation of relevant market;

(ii) assessment of dominant position/significant market power (SMP) in the relevant market; and

(iii) evaluation of whether the dominant enterprise is resorting to pricing below Average Variable Cost (AVC) with the intention of driving out competitors from the market.

**Relevant market**

3.9 The relevant market definition in telecommunications context is typically dictated by the structure of demand and supply in any given market. The market definitions in telecommunications context may vary significantly depending upon the premise and objective, as mostly, market definition is merely an enabling framework for competition analysis and not an end in itself. An assessment of predatory pricing begins with the delineation of the "relevant market", which helps in establishing an analytical framework for

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3 Telecommunication Tariff Order, 1999 (as amended up to 27.12.2016)

identifying the boundaries of competition between firms and the effect of various conduct on competition. Relevant market has two dimensions namely, (a) relevant product market and (b) relevant geographic market.

**Relevant Product Market**

3.10 As per the Competition Act, 2002, a relevant product market means a market comprising of all those products or services which are regarded as interchangeable or substitutable by the consumer, by reasons of characteristics of the products or services, their prices and intended use. The Competition Act lists out the various criteria that should be considered in arriving at a relevant product market definition. These include the physical characteristics or end-use of the goods or services, pricing of goods or services, customer preferences, exclusion of in-house production, existence of specialised producers and classification of industrial products. Some of these factors, such as customer preferences and the end-use of the services, capture the demand-side substitutability of a given service, while others such as the existence of specialised producers, capture the supply-side substitutability.

3.11 The European Commission has identified the following as the three main sources or competitive constraints for firms that need to be considered while arriving at a definition for the relevant product market:

(a)**Demand-Side Substitutability** - Demand substitutability is a measure of whether customers for the product in question can switch readily to a similar product in response to a small but permanent increase in the price of a particular good. Several jurisdictions use the "Hypothetical Monopolist" test, also known as the Small but Significant Non-Transitory Increase in Prices ("SSNIP") test, to determine demand-side substitutability. This entails

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6 See, Section 2(1) of the Competition Act, 2002
7 See, European Commission Notice on the Definition of Relevant Market (97/C372/03)
8 See, European Commission Notice on the Definition of Relevant Market (97/C372/03)
analyzing the change in demand for a product, where a hypothetical monopolist causes a small but significant and permanent increase in prices (typically assumed to be a 5% to 10% increase). If in response to such a price increase, the demand for product A reduces in favour of a near commensurate increase in the demand for product B, then products A and B are considered to be substitutable from a demand-side perspective. Accordingly, the product A and product B are considered to be a part of the same relevant market.9

(b) Supply-Side Substitutability - Supply side substitutability refers to the ability of other firms to switch production to the relevant products and market them in the short term.10 Similar to demand-side substitutability, supply side substitution seeks to identify the possibility of customers to switch to alternative suppliers, who might not be producing a direct substitute at the time. Therefore, there needs to be a determination of whether such other suppliers would start producing the product in question if there is a permanent price increase of 5-10% in the market, i.e. whether firms are able and willing to switch their production without incurring significant additional costs or risks in a short time period.11

(c) Potential Competition - The third competitive constraint is potential competition, which indicates the threat of entry of a new player in the long term or involves substantial sunk costs. Potential competition is an indirect constraint that is typically deferred to the assessment of market power/competitive effects assessment, since unlike supply-side substitution (which occurs immediately and in the short term) potential competition has a different time horizon.12

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9 Ibid., See also, Organisation for Economic Co-operation and Development, Policy Roundtables: Market Definition (2012)
10 Ibid., See also, Organisation for Economic Co-operation and Development, Policy Roundtables: Market Definition (2012)
11 Ibid., See also, Organisation for Economic Co-operation and Development, Policy Roundtables: Market Definition (2012)
12 Ibid., See also, Organisation for Economic Co-operation and Development, Defining the Relevant Market in Telecommunications (2014)
Relevant Geographic Market

3.12 A relevant geographic market means a market comprising the area in which the conditions of competition for supply of goods or provision of services or demand of goods or services are distinctly homogenous and can be distinguished from the conditions prevailing in the neighbouring areas.¹³

3.13 In the case of telecom services in India, respective telecom service license stipulate the geographical area in which the licensee is authorized to provide designated telecom service(s).

Assessment of Dominant position

3.14 The Competition Act, 2002 vide para 4, explanation (a) defines dominant position as given below: “dominant position” means a position of strength, enjoyed by an enterprise, in the relevant market in India, which enables it to-

(i) operate independently of competitive forces prevailing in the relevant market; or

(ii) affect its competitors or consumers or the relevant market in its favour.

3.15 The factors considered under Section 19(4) of the Competition Act while deciding the dominant position of an enterprise are: market share of the enterprise; size and resources of the enterprise; size and importance of the competitors; economic power of the enterprise including commercial advantages over competitors; vertical integration of the enterprises or sale or service network of such enterprises; dependence of consumers on the enterprise; monopoly or dominant position whether acquired as a result of any statute or by virtue of being a Government company or a public sector undertaking or otherwise; entry barriers including barriers such as regulatory barriers, financial risk, high capital cost of entry, marketing entry barriers,

¹³ See, Section 2(s) of the Competition Act, 2002
technical entry barriers, economies of scale, high cost of substitutable goods or service for consumers; countervailing buying power; market structure and size of market; social obligations and social costs; relative advantage, by way of the contribution to the economic development, by the enterprise enjoying a dominant position having or likely to have an appreciable adverse effect on competition and any other factor which the Commission may consider relevant for the inquiry.

**Approach in other jurisdictions**

3.16 A review of the experience in other jurisdictions on these issues shows that there is divergence in the available precedents on market definition for telecommunications services, mainly on account of the different factual matrix in each case.

**European Commission**

3.17 In the electronic communications sector there are at least two main types of relevant markets to consider, (a) market for services or facilities provided to end-users (retail markets) and (b) market for upstream access to facilities and networks which are necessary for operators to provide competitive access services to end-users (wholesale markets). Further on, different product markets are defined at both wholesale and retail level depending on demand and supply-side characteristics.

3.18 Markets defined in the recommendation on electronic communications sector is without prejudice to the markets defined in specific cases under competition law. Markets identified in the Recommendation, while based on competition law methodologies, will not necessarily be identical to markets defined in individual competition law cases. The focus is on an overall assessment of the structure and the functioning of the market under

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examination, for the purposes of determining whether or not to impose ex ante regulation.

3.19 The starting point in the delineation of the relevant market is the definition of retail markets over a given time horizon taking into account demand-side and supply-side substitutability from the end-users' perspective and on the prospective time horizon considered, especially in sectors like electronic communications where technological change can rapidly alter the boundaries of markets over time. European Commission has more or less consistently defined a wider market for mobile telephony services, which includes all forms of underlying technologies, i.e. 2G, 3G and 4G LTE. In *T-Mobile Austria/Tele-ring*, a single market definition was found to encompass services that could be provided across both 2G and 3G networks, but the question was left open about whether an additional market for special 3G services could be found.\(^\text{15}\) The Commission took a similar position in its decision in the *T-Mobile/Orange* merger, where it observed that while 3G networks did provide higher speed which enabled the delivery of data heavy services (such as video calling, multimedia services), a network operator can provide to its customer access to voice communication and text messaging services indifferently on a 2G or a 3G network. Accordingly, the Commission found a single market for the provision of mobile communication services to *end customers*, in so far as they can be provided on both 2G and 3G.\(^\text{16}\) Similarly, in its recent decision in *Hutchison 3G/ Wind*, the Commission delineated relevant market for the provision of mobile telephony services, including 2G, 3G and 4G LTE services.\(^\text{17}\)

3.20 However, the European Commission, as well as some other national

\(^{15}\) See, Case No COMP/M.3916 – T-Mobile Austria/Tele.Ring (Decision of the Commission dated 26 April 2006), Available at URL: http://ec.europa.eu/competition/mergers/cases/decisions/m3916_20060426_20600_en.pdf

\(^{16}\) See, Case No COMP/M.5650 – T-Mobile/Orange (Decision of the Commission dated 1 March 2010), Available at URL: http://ec.europa.eu/competition/mergers/cases/decisions/m5650_1469_2.pdf

\(^{17}\) See, Case M.7758-Hutchison 3G Italy/Wind/JV (Decision of the Commission dated 1 September 2016), Available at URL: http://ec.europa.eu/competition/mergers/cases/decisions/m7758_2760_3.pdf
regulatory authorities in Europe have also delineated narrower relevant markets for specific telecommunications services. For example, in the *Wanadoo Communications Case*, the Commission determined the relevant market to be one for "high-speed internet access services for residential customers", whereas the French telecom regulatory authority delineated a narrower relevant market for "high speed internet access using ADSL technology", on account of its difference in penetration potential in comparison with internet access cable.\(^\text{18}\) Likewise, in the case of *Wanadoo v. Telefonica*, the European Commission delineated relevant market for "non-differentiated" broadband services through ADSL or other means, noting that differentiated or tailor-made broadband services were targeted at a different set of customers with specified usage requirements.\(^\text{19}\)

**United States\(^\text{20}\)**

3.21 (a) As per the Horizontal Merger Guidelines of U.S. Department of Justice and the Federal Trade Commission, relevant market is determined by combining the product market and geographic market dimension which is then subjected to the hypothetical monopolist test to determine a relevant market. When a product sold by one merging firm (Product A) competes against one or more products sold by the other merging firm, the Agencies define a relevant product market around Product A to evaluate the importance of that competition. Such a relevant product market consists of a group of substitute products including Product A. Multiple relevant product markets may thus be identified.

\(^{18}\) See, Case No COMP/38.233 - Wanadoo Interactive (Decision of the Commission dated 16 July 2003), At Fn 235, “ART opinion No 00-28 dated 7 January 2000” on high-speed Internet access market using xDSL technologies, Available at URL: http://ec.europa.eu/competition/antitrust/cases/dec_docs/38233/38233_87_1.pdf

\(^{19}\) See, Case No COMP/38.784 – Wanadoo España vs. Telefónica (Decision of the Commission dated 4 July 2007), Available at URL: http://ec.europa.eu/competition/antitrust/cases/dec_docs/38784/38784_311_10.pdf

3.22 (b) The Federal Communications Commission (FCC), the Federal Trade Commission (FTC) and the Department of Justice (DoJ) in the United States have all independently held that residential high speed broadband internet access service constitutes a separate market from narrowband services\(^{21}\).

Australia\(^{22}\)

3.23 The following is a widely-accepted judicial definition of relevant market in Australia:

\textit{A market is the area of close competition between firms or ... the field of rivalry between them. ... Within the bounds of a market there is substitution—substitution between one product and another, and between one source of supply and another, in response to changing prices. ... In determining the outer boundaries of the market we ask a quite simple but fundamental question: if the firm were to 'give less and charge more' would there be, to put the matter colloquially, much of a reaction.\textit{ (Queensland Cooperative Milling Association Ltd/Defiance Holdings Ltd, re proposed merger with Barnes Milling Ltd (1976) ATPR 40-012)\textit{}}

Possible Relevant Markets

3.24 The extant TRAI approach on concept of dominance is elaborated in paras 3.4 & 3.5 above. Some possible scenarios for delineation of relevant market to decide dominance are discussed herein below for illustration, notwithstanding the possibility of delineation of other relevant markets.

\textit{Market for Wireline and Wireless services}

3.25 The defining feature of wireless services is the mobility that it offers to customers, which distinguishes it from wireline services. The demand and

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\(^{22}\)https://www.accc.gov.au/business/anti-competitive-behaviour/anti-competitive-agreements#what-is-the-market-
supply side of wireline and wireless services are different from each other, *inter-alia*, in terms of their dependence on spectrum and infrastructure requirement. The fixed line services are characterized by their lack of full mobility, which distinguishes them from mobile services. Accordingly, wireless and wireline services can be considered as two distinct relevant markets for the purpose of assessing dominance.

**Market for voice and data services**

3.26 One could look at the telecom market from the perspective of Voice and Data services that can be delivered through wireline or wireless mode. The data services can be further segmented on the basis of data speed irrespective of the mode of transmission i.e. wireline or wireless. Therefore, one may argue for delineation of three different markets-Voice, Narrowband and Broadband delivered through Wireline and wireless mode.

**Markets for Narrowband and Broadband services**

3.27 From the user's perspective, several factors contribute to distinguish between broadband and narrowband internet services. First, certain data-intensive applications are designed to be used only on broadband networks. Second, the cost of usage of broadband is much higher than narrowband. Third, trend of data consumption on broadband networks has been observed to be significantly higher as compared to narrowband networks. These differences suggest possible delineation of narrowband and broadband through wireline and wireless as distinct relevant markets.

**Market based on type of technology**

3.28 From demand side perspective, a consumer, who is desirous of availing wireless voice services, will most likely be indifferent about the underlying technology used for delivering the services and would accordingly consider all
forms of wireless voice services to be substitutes. Price of compatible mobile devices may, however, be a constraining factor for users - the supported frequency bands on a device determine its compatibility with different types of networks. For instance, VOLTE services can ordinarily be used only by a person who owns a 4G LTE compatible handset.

3.29 On the supply side, operators are likely to face significant constraints in switching from one technology to another in the short run. Firstly, an operator's choices are defined by the spectrum bands that it holds and the technology that the allocated spectrum band supports. It has been noted by the Authority in the past that even though the UAS license is service and technology neutral, there are certain legacy issues surrounding the use of particular bands for specific technologies, i.e. CDMA or GSM. The spectrum allocated in subsequent auctions, is however, technology neutral. Secondly, the Core Network (CN) Equipment and Radio Access Network (RAN) Equipment for LTE and Evolved Packet Core (EPC) based networks, are significantly different from the CN and RAN equipment deployed in 2G/3G networks. Therefore, for an operator with 2G network equipment, it is not an option to switch to 4G LTE services in short run, without incurring substantial costs.

3.30 Accordingly, it can be argued that from a supply side perspective, 4G services constitute a separate market. This market definition can also be supported by the existence of asymmetric or one-way substitution -- while an increase in the prices of 2G/3G services might prompt a user to switch to 4G LTE based services, whereas a commensurate increase in the prices for 4G LTE based services, might not lead to a similar migration towards 2G/3G technology.

3.31 To summarise, the relevant market definition in the context of

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telecommunications services is dictated by the structure of demand and supply. A review of precedents reveals that market definitions in a telecommunication context may vary significantly depending upon the premise and objective, as mostly, market definition is merely an enabling framework for analysis and not an end in itself\textsuperscript{24}. However, the Authority is required to follow an evidence based approach towards assessing demand and supply side substitution and delineate appropriate relevant markets for the purpose of analyzing the effects of pricing practices of TSPs.

3.32 In view of the above, following questions arise for consultation:

**Question 4:** What should be the different relevant markets – relevant product market & relevant geographic market – in telecom services? Please support your answer with justification.

**Question 5:** How to define dominance in these relevant markets? Please suggest the criteria for determination of dominance.

**Question 6:** How to assess Significant Market Power (SMP) in each relevant market? What are the relevant factors which should be taken into consideration?

**Question 7:** What methods/processes should be applied by the Regulator to assess predatory pricing by a service provider in the relevant market?

**Question 8:** Any other issue relevant to the subject discussed in the Consultation Paper may be highlighted.

Issues for consultation

4.1 In view of the issues discussed above, following questions are being raised for comments of the stakeholders. Responses to the questions are solicited with justification:

Question 1: Do you think that the measures prescribed currently are adequate to ensure transparency in the tariff offers made by TSPs? If not, then, what additional measures should be prescribed by the TRAI in this regard? Kindly support your response with justification.

Question 2: Whether current definition relating to “non-discrimination” is adequate? If no, then please suggest additional measures/features to ensure “non-discrimination”.

Question 3: Which tariff offers should qualify as promotional offers? What should be the features of a promotional offer? Is there a need to restrict the number of promotional offers that can be launched by a TSP, in a calendar year one after another and/or concurrently?

Question 4: What should be the different relevant markets – relevant product market & relevant geographic market – in telecom services? Please support your answer with justification.

Question 5: How to define dominance in these relevant markets? Please suggest the criteria for determination of dominance.

Question 6: How to assess Significant Market Power (SMP) in each relevant market? What are the relevant factors which should be taken into consideration?
Question 7: What methods/processes should be applied by the Regulator to assess predatory pricing by a service provider in the relevant market?

Question 8: Any other issue relevant to the subject discussed in the Consultation Paper may be highlighted.
### List of Acronyms

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2G</td>
<td>2nd Generation</td>
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<tr>
<td>2.</td>
<td>3G</td>
<td>3rd Generation</td>
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<tr>
<td>3.</td>
<td>4G</td>
<td>4th Generation</td>
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<td>4.</td>
<td>AVC</td>
<td>Average Variable Cost</td>
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<tr>
<td>5.</td>
<td>BSNL</td>
<td>Bharat Sanchar Nigam Limited</td>
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<td>6.</td>
<td>CEOs</td>
<td>Chief Executive Officers</td>
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<td>7.</td>
<td>CDMA</td>
<td>Code Division Multiple Access</td>
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<td>8.</td>
<td>CMTS</td>
<td>Cellular Mobile Telecommunication Services</td>
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<td>9.</td>
<td>CN</td>
<td>Core Network</td>
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<td>10.</td>
<td>CVs</td>
<td>Combo Vouchers</td>
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<td>11.</td>
<td>US DoJ</td>
<td>United States Department of Justice</td>
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<tr>
<td>12.</td>
<td>DoT</td>
<td>Department of Telecommunication</td>
</tr>
<tr>
<td>13.</td>
<td>EPC</td>
<td>Evolved Packet Core</td>
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<td>14.</td>
<td>FCC</td>
<td>Federal Communication Commission</td>
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<tr>
<td>15.</td>
<td>FTC</td>
<td>Federal Trade Commission</td>
</tr>
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<td>16.</td>
<td>GSM</td>
<td>Global System for Mobile Communications</td>
</tr>
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<td>17.</td>
<td>ISDN</td>
<td>Integrated Services Digital Network</td>
</tr>
<tr>
<td>18.</td>
<td>IUC</td>
<td>Interconnection Usage Charges</td>
</tr>
<tr>
<td>19.</td>
<td>LTE</td>
<td>Long Term Evolution</td>
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<td>20.</td>
<td>MTNL</td>
<td>Mahanagar Telecom Nagar Limited</td>
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<td>21.</td>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>22.</td>
<td>OTT</td>
<td>Over the Top</td>
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<td>23.</td>
<td>PoS</td>
<td>Point of Sale</td>
</tr>
<tr>
<td>24.</td>
<td>PSTN</td>
<td>Public Switched Telecommunication Network</td>
</tr>
<tr>
<td>25.</td>
<td>PVs</td>
<td>Plan Vouchers</td>
</tr>
<tr>
<td>26.</td>
<td>RAN</td>
<td>Radio Access Network</td>
</tr>
<tr>
<td>27.</td>
<td>SMP</td>
<td>Significant Market Power</td>
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<tr>
<td>28.</td>
<td>SSNIP</td>
<td>Small but Significant Non-transitory Increase in Price</td>
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<td>29.</td>
<td>STVs</td>
<td>Special Tariff Vouchers</td>
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<tr>
<td>30.</td>
<td>TCPR</td>
<td>Telecom Consumer Protection Regulation</td>
</tr>
<tr>
<td>31.</td>
<td>TRAI</td>
<td>Telecom Regulatory Authority of India</td>
</tr>
<tr>
<td>32.</td>
<td>TSPs</td>
<td>Telecom Service Providers</td>
</tr>
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<td>33.</td>
<td>TTO</td>
<td>Telecommunication Tariff Order</td>
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<td>UAS</td>
<td>Unified Access Services</td>
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<tr>
<td>34.</td>
<td>VoLTE</td>
<td>Voice over Long Term Evolution</td>
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</tbody>
</table>