



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority

Competition Guidelines

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Purpose: To provide guidance on how TRA will define relevant markets, assess competition in the telecommunications sector and anti-competitive conduct as well as to set the process and template for lodging a complaint for anti-competitive conduct.

List of Acronyms

ARCEP	Autorité de Régulation des Communications Electroniques et de la Poste (French telecommunications regulator).
ATC	Average total cost
AVC	Average variable cost
BT	British Telecom
CMT	Comisión del Mercado de las Telecomunicaciones (Spanish telecommunications regulator)
CPS	Carrier-pre-selection
EC	European Commission
EPMU	Equi-proportionate mark-up
ERG	European Regulators Group
EU	European Union
IRR	Internal rate of return
JCRA	Jersey Competition and Regulatory Authority
LRIC	Long-run incremental cost
MVNO	Mobile Virtual Network Operator
Ofcom	Office of Communications (UK telecommunications regulator)
OFT	Office of Fair Trading (UK competition authority)
Oftel	Office of Telecommunications (former UK telecommunications regulator superseded by Ofcom)
ROCE	Return on capital employed
ROT	Return on turnover
SAC	Stand alone cost
SMP	Significant Market Power
SSNIP	Small but significant non transitory increase in price
TRA	Telecommunications Regulatory Authority of the Kingdom of Bahrain
WACC	Weighted Average Cost of Capital

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Executive summary

1. The Telecommunications Regulatory Authority (“TRA”) is responsible for the protection of consumers’ interest and the promotion of competition. Chapter 15 of the Telecommunications Law (Article 15) empowers TRA to take action to preserve competition in the telecommunications sector.
2. These Guidelines have been designed to help market participants understand how TRA will assess competition in the telecommunications sector. This includes both ex-ante market reviews and ex-post investigations into anti-competitive behaviour. Detailed guidance is provided on each step involved and example case studies from other countries have been provided to put specific types of anti-competitive behaviour into context.
3. The Guidelines focus on abuse of dominant position. Other anti-competitive practices, such as collusive agreements and changes to market structure that raise competition concerns are only very briefly touched upon.
4. The Guidelines begin by explaining how the boundaries of the relevant market should be determined, both in the context of an ex-ante and an ex-post assessment. The theoretical approaches to delineating the market along both product and geographic dimensions are discussed as well as the practical aspects of applying these techniques.
5. Next, the Guidelines turn to assessing the degree of market power and determining whether any operator is dominant or possesses significant market power (“SMP”) within the context of either an ex-ante or an ex-post assessment. Initially, this section considers the legal definitions of these terms, before then describing the potential competitive constraints which could exist, including the various types of barriers to entry. Finally, it briefly touches on the issue of joint dominance and the conditions under which it could occur.
6. The Guidelines then move on to the anti-competitive provisions of the Telecommunications Law. This section looks at the relevant legal provisions; the elements required to establish that anti-competitive conduct is occurring or has occurred; the potential forms of anti-competitive conduct in the Telecommunications Law; and the potential sanctions for anti-competitive behaviour (i.e. remedy and fine).
7. The next section considers possible types of anti-competitive conduct which are likely to be the most relevant in the telecommunications sector. It provides specific guidance on each type of anti-competitive behaviour, including the types of evidence which would be required to confirm it. The conducts considered are:
 - excessive pricing – when prices are set significantly and persistently above the competitive level;
 - predatory pricing – when prices are set anti-competitively below cost;
 - margin squeezing – when a vertically integrated operator sets the price of the retail and/or wholesale product such that the margin between the two does not enable an efficient competitor in the retail market to trade profitably;
 - bundling or tying – when two or more products are sold together in an anti-competitive manner;
 - price or non-price discrimination – when equivalent products are provided to different customers on different terms in an anti-competitive manner;

- on-net/off-net price discrimination – when the prices of on-net and off-net calls¹ diverge in an anti-competitive manner;
 - refusal to supply – when a dominant vertically integrated operator’s behaviour unreasonably restricts competitors access to its network; and
 - unduly long-term contracts – when retail service contracts are unjustifiably long.
8. Finally, the Guidelines turn to the process for lodging a complaint regarding another operator’s behaviour. This section explains in detail the information which the complainant should submit to TRA and sets out the process that TRA will follow and an associated timetable. Annex 2 contains a template for submitting complaints for anti-competitive conduct.

¹ “on-net calls” are those made to other users on the same mobile (or fixed) network and “off-net calls” are those made to users on other mobile (or fixed) networks.

1 INTRODUCTION

9. The Telecommunications Regulatory Authority (“TRA”) is responsible for the protection of consumers’ interest and the promotion of competition. Articles 3(b)(2), 3(c) and Article 65 of the Telecommunications Law empowers TRA to take action to preserve competition the telecommunications sector.
10. This document sets out TRA’s Guidelines for the definition of relevant markets; the assessment of competition in both retail and wholesale telecommunications markets; and the assessment of anti-competitive conduct. This document also sets out the process and template for lodging a complaint for anti-competitive conduct.
11. TRA has a dual role. TRA is both the regulator of the telecommunications sector in the Kingdom of Bahrain and acts as the competition authority in the telecommunications sector.
12. It is often said that regulation is enacted with a view to pre-empt the occurrence of something that may prejudice the marketplace, that is, *before* the occurrence of such a prejudicial fact. The term “ex ante” refers to “before the event” or “beforehand” and is commonly used to refer to intervention by a regulator in this way.
13. On the other hand, intervention by an authority to remedy an anti-competitive conduct or agreement happens *after* the anti-competitive occurrence and the term “ex post” refers to after the event and is commonly used to refer to competition law intervention.
14. The main objective of economic regulators such as TRA is to ensure that competition is effective and where it is not, to take adequate steps to ensure that competition is promoted. Consequently, part of the remit of TRA is to monitor the level of competition in a range of markets. In some cases this requires TRA to assess the need for and requirements of ex-ante regulation. In other cases, TRA will need to determine whether anti-competitive conduct is occurring or has already occurred and decide on the required ex-post remedy.²
15. In order to provide greater clarity and predictability, it is important that a transparent set of principles are established on which TRA will base its approach to the assessment of competitive conditions. At a time where competition is intensifying, one of the aims of these Guidelines is to better inform market participants on how TRA will assess potential ex-post competition issues.

Application of the Guidelines to ex-ante and ex-post analysis of competition

16. The Guidelines apply to both ex-ante and ex-post analyses of competition. The process with respect to ex-post investigations will involve:
 - identifying the conduct which is considered to be potentially anti-competitive;
 - defining the associated market and other relevant market(s) where appropriate;
 - assessing competition and hence dominance (as at the time of the alleged conduct) where appropriate; and finally
 - determining whether the conduct is (or was) anti-competitive and its effect on competition. If found anti-competitive, TRA may determine any appropriate remedies and fines.

² Markets covered by ex-ante regulation could still be subject to ex-post investigations.

17. Under an ex-ante review, the approach is slightly different. Ex-ante remedies are designed to modify or check behaviour on an ongoing basis to prevent abuse. The process will involve:
 - defining the relevant market(s) on a forward-looking basis; and
 - assessing competition and whether any operator holds (and is expected to continue to hold) a position of dominance or significant market power (“SMP”) as per Articles 57 and 58 respectively.
18. The next step in an ex-ante analysis is the identification and definition of appropriate and proportionate remedies where an operator is determined dominant or has SMP as per the requirements of the Telecommunications Law. However, this step is not part of the analysis of competition analysis and is beyond the scope of these Guidelines.
19. The approach taken when defining relevant markets and analysing competition in the context of both ex-post and ex-ante analyses will be based on consistent principles, but they will be adapted where necessary. More details are provided in the relevant sections regarding how these steps differ, according to the nature of the analysis. It is case specific.
20. The Guidelines focus on abuses of dominant position as there are a particularly thorny issue in the telecommunications sector, especially at a time when de-regulatory steps are implemented. Allegations of abuses of dominant position are also the most likely complaints for anti-competitive behaviour and accordingly guidelines that place emphasis on abuses of dominant position should be particularly useful to market players and other stakeholders. Other anti-competitive practices, such as collusive agreements and changes to market structure that raise competition concerns are only very briefly touched upon.³
21. Sections 2 and 3 of the Guidelines are relevant to ex-ante and ex-post investigations. These Sections also explain how ex-ante and ex-post analyses may differ. Sections 4, 5 and 6 apply only to ex-post investigations.

Background to TRA’s Guidelines

22. These Guidelines build upon TRA’s previous determinations on defining relevant markets and market power assessment and also take into account the provisions in the Telecommunications Law, as promulgated by the Legislative Decree No. 48 of 2002, (“Telecommunications Law”) as well as the experience of TRA with respect to market definition and competition analysis.
23. Further, in order to ensure that these Guidelines represent best practice and do not impart an undue burden on any of the parties involved, TRA has had regard to established practices of other regulatory and competition authorities.⁴ In addition,

³ The Telecommunications Mergers and Acquisitions Regulation issued by TRA in 2004 sets how TRA reviews mergers and acquisitions involving licensed operators. At the time of writing it remains in effect.

⁴ For example, TRA has had regard to OFT (UK) Guidelines – Market definition, Assessment of Market Power, and Abuse of a dominant position; OFT (UK) – Competition Act 1998, the application in the telecommunications sector; New Zealand Commerce Commission – Anti-competitive practices under part II of the Commerce Act; Ofcom – Market review guidelines; EC Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, 2002/C 165/03; EC, Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, 2009.

consideration has been given to the specific characteristics of the local market, including the relative size of Bahrain's telecommunications sector.

Legal status of the Guidelines

24. The Guidelines are issued by TRA pursuant to Articles 3 and 65 of the Telecommunications Law. The Guidelines do not legally bind TRA. Whilst TRA would anticipate following the principles outlined here in assessing competition, there may be differences in how individual cases or allegations of anti-competitive behaviour are assessed and TRA reserves the right to consider other factors not listed in these Guidelines. In addition, TRA may consider it unnecessary to assess all factors listed in the Guidelines (for example related to market definition or the assessment of market power). Rather, TRA will have regard, in all cases, to the most relevant factors in relation to that case. If TRA were to take an approach to a specific case which involves a significant departure from the Guidelines, then TRA would provide an explanation for doing so.

Structure and content of the Guidelines

25. The structure of the Guidelines follows the steps that TRA would need to take in reviewing the competitive conditions in a market.
- Section 2 presents the approach to defining the relevant market;
 - Section 3 explains how TRA will assess competition and market power within the market concerned;
 - Section 4 sets out the anti-competition provisions of the Telecommunications Law;
 - Section 5 outlines the main types of anti-competitive behaviour that could occur and how they would be analysed; and
 - Section 6 describes the process by which a complaint should be lodged with TRA regarding anti-competitive behaviour (i.e. in relation to alleged breaches of Section 65 of the Telecommunications Law), together with how TRA will deal with complaints.
26. To make it easier to understand these Guidelines, summaries of relevant cases⁵ have also been included. In each case, the Guidelines describe the particular allegations of anti-competitive conduct that have arisen and the outcome of the resulting investigation.
27. TRA intends to update these Guidelines from time-to-time in light of its experience and practice, market developments and international practice and case law.

⁵ For the avoidance of doubt, these are provided for illustrative purposes only, and should not be interpreted as being directly applicable to Bahrain. TRA will consider any case on its own merits.

2 DEFINING A RELEVANT MARKET

2.1 Introduction

28. A relevant market is a defined set of products or services and a defined geographic area(s) in which competition occurs. An economic market for a product or service includes all products or services that are considered to be close substitutes. These products or services therefore compete directly with each other and the potential demand- or supply-side substitution between them constrains their prices to the competitive level.⁶ For example, a relative increase in the price of one of the products above the competitive level would lead consumers⁷ to switch to one of the other competing and now relatively cheaper goods (demand-side substitution). Similarly, such an increase in price would lead suppliers to switch production from one of the other products in the market to this now relatively more profitable product (supply-side substitution). Consequently, it would not be profitable for suppliers to raise prices above the competitive level.
29. Defining a relevant (economic) market is not an end in itself but is a critical step in assessing the degree to which any firm or firms in that market have market power. For example, without defining the boundaries of the market, it is not possible to calculate a firm's share of that market.
30. This section describes a standard process which can be applied by TRA to any case where it is required to define relevant market (i.e., both when reviewing the appropriateness of ex-ante regulation and when, ex-post, assessing potential breaches of Section 65 of the Telecommunications Law).
31. The relevant market delineations for the purpose of an investigation of an alleged anti-competitive practice may differ from those used in an ex-ante context to reflect the specific circumstances of the case and the information available at the time of the alleged anti-competitive practice. In addition, by its nature, an ex-ante assessment will be "forward-looking" (i.e. based on current circumstances and current views of their likely development) whereas ex-post assessments will be "backward-looking" (i.e. based on current understanding of the circumstances at the time of the alleged abuse). In competition cases, the market definition centres on the product or service directly affected by the alleged anti-competitive conduct. Therefore, the definition of the market may differ, depending on whether it is defined on a forward- or backward-looking basis. This is a principle recognised by other authorities, including the European Commission ("EC").⁸ Nevertheless, if a

⁶ At the competitive level, prices cover the costs incurred, inclusive of a return on capital employed commensurate with the risks involved.

⁷ In the guidelines, "consumers" refers to all users of telecommunications services, including business and residential.

⁸ The following quote from the EC illustrates this point well:

"markets defined in the Recommendation are without prejudice to markets defined in specific cases under competition law... the starting point for carrying out a market analysis for the purpose of Article 15 of the Framework Directive is not the existence of an agreement or concerted practice within the scope of Article 81 EC Treaty, nor a concentration within the scope of the Merger Regulation, nor an alleged abuse of dominance within the scope of Article 82 EC Treaty, but is based on an overall forward-looking assessment of the structure and the functioning of the market under examination. NRAs and competition authorities, when examining the same issues in the same circumstances and with the same objectives, should in principle reach the same conclusions. However, given the differences outlined above, the possibility that markets defined for the purposes of competition law and markets defined for the purpose of sector-specific regulation may not be identical cannot be excluded."

relevant ex-ante market had already been defined, TRA would expect that this would represent the starting point for determining the market definition in an ex-post context.

32. When defining markets for the purposes of ex-ante regulation, it may be appropriate to group together markets/products into “cluster markets” where the benefits of analyzing them separately are limited. It is therefore often the case that markets defined for the purposes of ex-ante regulation are wider than the markets considered in an ex-post context.
33. This section firstly considers how to define the product market and begins with a description of the widely accepted, standard procedures employed by many competition authorities and regulators. It then considers how TRA may implement these procedures in practice, taking account of the fact that the test is more of a conceptual framework than a pre-defined set of rigid rules. It then considers how the geographic limits of the market will be determined, drawing upon recent European developments in this area and the particular characteristics of Bahrain. Finally, the Guidelines refer to some other market dimensions which may require consideration.

2.2 Product market

Assessing demand and supply-side substitution: the hypothetical monopolist test

34. The focus for determining the boundaries of a relevant product market is upon the products or services that are close substitutes in the eyes of buyers (i.e. demand-side substitution) and of suppliers (i.e. supply-side substitution).
35. The standard approach taken by competition authorities to define a market is to apply the “hypothetical monopolist” or the “small but significant, non-transitory increase in price” (“SSNIP”) test which takes into account the significance of demand- and supply-side substitution. This test defines a group of products which are such close substitutes to be considered part of the same market. The approach is to assume that the products are supplied by a “hypothetical monopolist”. If it is profitable for this monopolist to maintain a “small but significant, non-transitory” increase in the prices of those products then the market has been defined. The justification is that if this price rise can be maintained without a decline in profitability, then further demand-side or supply-side substitution away from the monopolist’s products must be reasonably insignificant.
36. Formally, under this test, a market is defined as:

“a product or group of products...such that a hypothetical profit maximising firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose a small but significant and non-transitory increase in price, assuming that the terms of sale of all other products are held constant.”⁹
37. A small but significant price increase is normally interpreted to mean an increase of between 5% and 10% relative to the competitive price level. “Non-transitory” is

See - accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex-ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, Second edition, Section 2.1

⁹ US Department of Justice, horizontal merger guidelines (issued 1992, revised 1997), Section 1.0.

normally assumed to mean that the price rise will last for approximately one year. However, due to the dynamic nature of telecommunications markets, in terms of the rate of technological change, it may be appropriate to extend this period to 1 – 2 years, in order to ensure that the markets are not too narrowly defined (i.e., that they do not exclude potential supply-side substitutes that may arise from evolving technology). TRA will assess this on a case-by-case basis.

38. Although the “small but significant, non-transitory” increase in price is supposed to be measured relative to the competitive price, in some cases the prevailing price will not be the competitive price. This will be the case if certain participants currently have market power. If a 5% – 10% increase were applied to a price which exceeds the competitive level then an inappropriate market definition could be reached.¹⁰ Consideration needs to be given to this when assessing what would be the price set by the hypothetical monopolist. In telecommunications markets, particularly if tariff rebalancing has not occurred, it is also possible that individual prices might be below the level that would emerge in a competitive market. TRA will therefore also take this into account when assessing the potential degree of substitution between products.

Applying the test in practice

39. To apply the test TRA will start by assuming that the market just includes the product under consideration (the “focal product”)¹¹. The next step is to consider whether prices could be profitably increased by 5% – 10% and if not, which other products would, at the margin, be affected. The outcome of this hypothetical test depends on the expectations about demand- and supply-side substitution. The evidence required to assess this is discussed in detail below. It is not necessary that all consumers or suppliers are encouraged to switch to substitutes, but that enough marginal consumers or suppliers are encouraged to switch such that the price change is not profitable. If the price increase cannot be profitably maintained, this indicates that the boundaries of the market need to be widened. The group of products sold by the hypothetical monopolist would then be extended to incorporate those products that the consumers switched to and the products the suppliers switched from producing and the test would be repeated. This process continues until no further substitution would be expected to occur.
40. Whilst the analysis of demand- and supply-side substitution is the same in an ex-ante and ex-post context, the starting point for the definition of relevant markets for the purpose of ex-ante regulation may be slightly different as there is no complaint or focal product of a complaint as such. Rather, TRA may start with broadly defined markets and narrow them down. This is consistent with international practice, such as in the European Union (“EU”).

¹⁰ This is known as the Cellophane Fallacy, following a US antitrust case. If a firm is already engaged in monopoly pricing, there may appear to be a large number of potential substitutes at that prevailing price. However, given that the prevailing price is above the price level that would emerge in a competitive market, it is not the case that all these apparent substitutes form part of the same market.

¹¹ Depending on the extent of demand complementarities, the relevant unit of analysis may be a system of services, a cluster or a bundle, rather than a single product.

41. Figure 1 below displays the SSNIP test in the form of a diagram.

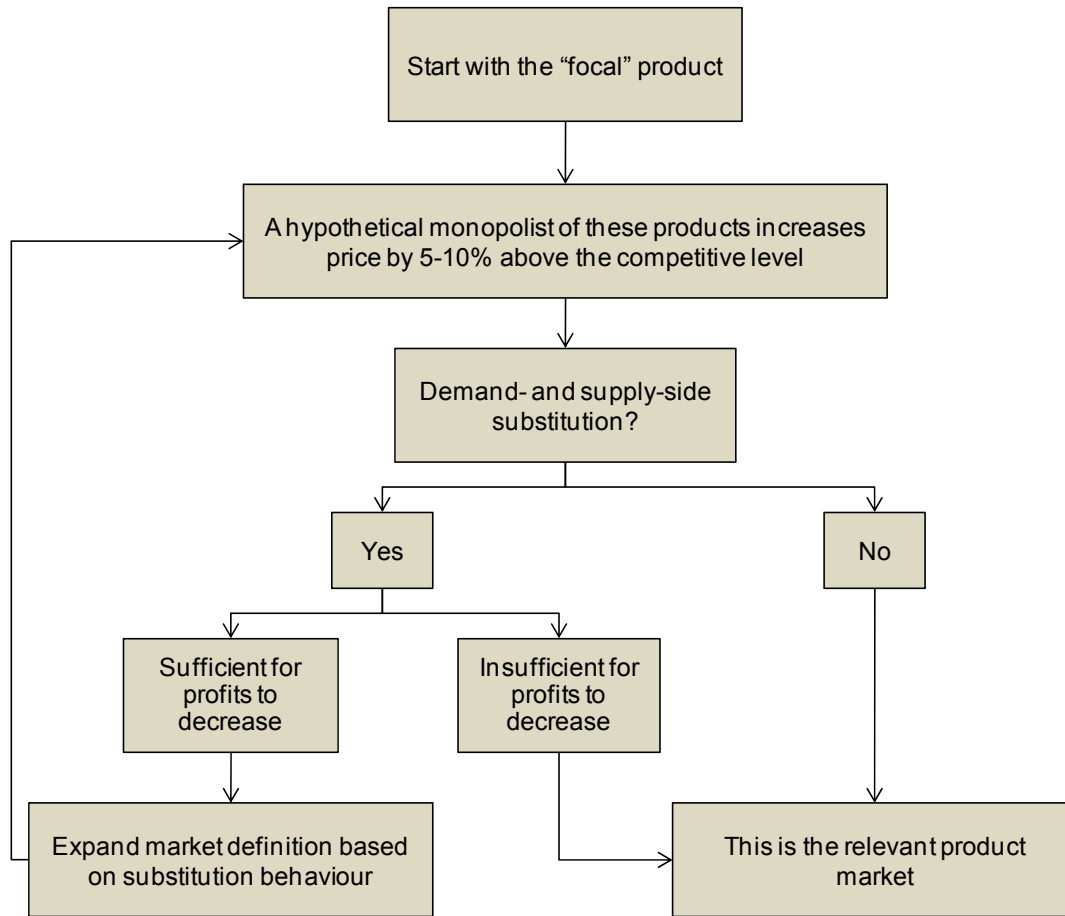


Figure 1: The SSNIP test

42. The document explains below in more detail the issues that TRA will have to take into account in defining the relevant product market and how the extent of demand- and supply-side substitution could be assessed.

Evidence of demand-side substitution

43. When the price of the "focal product" is increased, some customers may switch to other substitute products. The issue in defining the market is whether the fall in the hypothetical monopolist's sales is sufficient to offset the price increase and so reduce profit. The fall in profit is measured relative to the outcome if prices were maintained at their competitive level.

44. Two key issues to take into consideration are how long it would take customers to respond and the extent of switching costs. As explained above, 1 – 2 years would be an appropriate period over which to assess consumers' behaviour. If it takes consumers too long to react or switching costs are too onerous, then the level of demand-side substitution will be more limited. Consequently, the loss of demand may not be sufficient to make the price increase unprofitable. Finally, it is important, when considering the hypothetical behaviour of consumers, to check whether the proposed substitution would be achievable given the prevailing capacity constraints of the suppliers of the substitute products. If not, then the products cannot be considered to exert a sufficient constraint.

45. There is a range of potential evidence and techniques which TRA may consider when deciding on the likely extent of demand-side substitution, examples of which are listed below. However, TRA is aware that some of these sources of evidence, whilst potentially useful, may be difficult to obtain. Further, not all sources of evidence or techniques used to define markets may be applicable in all cases. As such, TRA will assess, on a case-by-case basis, the evidence available in order to make an informed judgement regarding the likely boundaries of the relevant market. Factors that TRA may consider to analyse demand-side substitution include the following:
- the historic and potential future behaviour of buyers (including historic trends in penetration or demand, in order to identify any potential substitution);
 - the functionality and characteristics of the products, in order to assess how likely it is that consumers will view them as substitutes;
 - customer surveys;
 - product price levels over time;
 - price correlations, to identify simultaneous price movements that are not due to cost changes or general inflation (on the basis that if goods A and B are substitutes, then an increase in the price of good A will lead to an increase in demand for good B. This in turn will increase the price of good B);¹²
 - switching costs associated with switching consumption between products.
 - the views of market players, including, if available, commercial strategies of the market participants (e.g., internal documentation providing evidence of the products which they believe to be substitutes for their own product);
 - critical loss analysis which seeks to determine the volume which would have to shift to other product(s) to make a SSNIP unprofitable;
 - own-price elasticities, which measure the sensitivity of demand for a product or service to changes in its own price; and
 - cross-price elasticities between products or services, which measure the sensitivity of demand for one product or service to changes in the price of the other.

Evidence of supply-side substitution

46. When the price of the “focal product” is increased by the hypothetical monopolist, other suppliers may be incentivised to enter the market. The question then is whether this would occur on a large enough scale such that the possibility of supply-side substitution would leave the hypothetical monopolist unable to maintain its prices above the competitive level, due to loss of sales to new entrants and hence loss of profits. If the same or sufficiently similar products can be produced using different technologies from the focal product, then these other products will be taken into account, as appropriate.
47. In determining the likely extent of supply-side substitution, the two key issues to be considered are how quickly the suppliers could react and whether they could do so without incurring significant sunk costs. As explained, the benchmark period for assessing both consumers’ and suppliers’ responses is considered to be 1 – 2 years. The avoidance of sunk costs may only be feasible where a firm already

¹² It would also be important to rule out any other possible explanations for a simultaneous movement in prices.

produces a product or service which requires the supplier to own similar assets. Sunk costs are frequently an important consideration in assessing markets in the telecommunications sector.

48. In considering supply-side substitution, the aim is to determine if there are any additional substitute products which should form part of the market. Therefore if a product has been included within the market as a result of evidence of demand-side substitution then evidence of supply-side substitution towards this product is not necessary. Similarly, if a product is included within the market due to supply-side substitution, evidence of demand-side substitution would not be required.
49. Potential evidence which TRA may consider when deciding on the likely extent of supply-side substitution includes the following:
 - Historic evidence of entry into the market by new firms and supply-side substitution.
 - Information from existing or potential suppliers on:
 - their technical ability to switch to the production of the other product;
 - the likely costs of switching production and the degree (if any) to which investment (including sunk investment) may be required; and
 - the time it would take to switch.
 - Data on the extent of spare capacity available which could be used to supply the product.
50. It should be noted that, as with the assessment of demand-side substitution, TRA will consider the evidence available on a case-by-case basis.

Market definition – example: Narrowband and broadband internet services

In its 2008 Significant Market Power Determination, TRA defined separate markets for narrowband and broadband internet services.¹³ Whilst TRA observed evidence of demand-side substitution from narrowband to broadband services, this substitution was considered to be one-way (i.e., consumers would be unlikely to switch, in the event of a SSNIP, back from broadband to narrowband). In addition, the differing characteristics between the two products and the relative price differentials between narrowband and broadband access further pointed to defining separate markets for each service.

2.3 Geographic market

51. Conceptually, defining geographic markets involves assessing the extent to which competitive conditions and constraints are appreciably different across geographic areas. This is necessary to determine whether it is justifiable to define them as separate markets.
52. The detailed consideration of geographical market boundaries is a relatively recent development in telecommunications market regulation. In the past, it has been common for regulatory authorities to define relevant economic markets on a national basis, on the grounds that both the prevailing licensing regime and

¹³ TRA, Determination of significant market power in certain relevant retail markets, TRA, 3 June 2008.

underlying network of the incumbent operator was national.¹⁴ However, as competition has developed, with new operators entering markets and more services (such as broadband) being provided at a local level, there is, in some jurisdictions, increasing pressure on such national market definitions.¹⁵

53. Over the medium to longer term, TRA believes that it may become necessary to consider the extent to which it is reasonable to define national markets for telecommunications services in the Kingdom of Bahrain. The launch of new property developments, where the incumbent telecommunications provider is a licensee other than Batelco, is an important factor in this regard. TRA is currently developing its approach on regulatory issues associated with deploying fixed line networks in new property developments.¹⁶ This analysis has so far concluded that symmetrical open access policies should be encouraged in new developments. If such open network access is not offered, TRA concluded that it may have to consider individual regulatory / enforcement actions to ensure open network access.
54. In developing its Guidelines for assessing relevant geographic markets, TRA has had regard both to international best practice (including the guidance from the European Commission (“EC”) and the European Regulators Group (“ERG”) on this matter)¹⁷ and the extent to which detailed analysis of geographic markets is appropriate in Bahrain.
55. This second point relates to the relatively small overall size of the telecommunications sector and of the Kingdom of Bahrain and hence the extent to which detailed geographic market analysis is justified or proportionate in the context of the sector for ex-ante analysis. Whilst geographic markets may be warranted in specific circumstances and may allow better targeted regulation, the benefits of defining more granular markets may be outweighed by the associated costs. Sub-national geographic markets may not provide tangible benefits. They tend to lead to a more complex and costly process for the design and implementation of regulation. This added burden falls on both the regulator and operators.
56. Given the need to avoid assessments of geographic market definition imparting an undue burden on all stakeholders, TRA proposes a two-stage process for defining relevant geographic markets: a preliminary analysis to determine if geographic segmentation may be required and then, if necessary, a more detailed assessment of geographic market boundaries.

¹⁴ Whilst there have been some exceptions to this, for example in Oftel / Ofcom’s treatment of a separate geographic market for the Hull area of the UK, these distinctions have in general been based on the geographic areas serviced by each incumbent operator. So, for example, Oftel / Ofcom defines separate markets for fixed telephony services in the Hull area to take account of the fact that in the Hull area, Kingston Communications, rather than BT, is the incumbent provider of fixed telephony. In 2007, Kingston Communications had around 200,000 subscribers, out of about 33 million nationally (source: Telegeography).

¹⁵ For example, Ofcom defined in 2007 separate geographic markets within the UK for wholesale broadband access services, to take account of the differing levels of competition faced by BT across parts of the UK. See Ofcom (2007): “Review of the wholesale broadband access markets 2006/07 – Identification of relevant markets, assessment of market power and proposed remedies”.

¹⁶ See TRA, Draft Position Paper on the Deployment of Telecommunications Networks in New Property Developments, 27 May 2009 and also TRA presentation, “*Meeting on Regulatory Issues Related to the Deployment of Telecommunications Networks in New Property Developments*”, June 2008.

¹⁷ EC, UK/2007/0733: Wholesale Broadband Access in the UK, Comments pursuant to Article 7(3) of Directive 2002/21/EC; ERG “ERG Common Position on Geographic Aspects of Market Analysis (definitions and remedies), October 2008.

Preliminary analysis

57. TRA will take as a starting point that a market is national unless proven otherwise. It will therefore start by performing a set of initial checks, to decide whether there is any evidence to suggest that a market is *not* likely to be national and therefore whether further detailed analysis is actually necessary. This preliminary assessment will prevent the need to collect large amounts of data, which can be costly and time-consuming, except in those instances where it would be necessary.
58. In considering whether to define separate markets in an ex-ante context, TRA will have regard to the likely size of the proposed market, in order to determine the likely materiality of the issues at stake. In addition, TRA would, in an ex-ante context, be inclined to consider defining a new development as a separate geographic market only once the development has been launched and the competitive landscape has stabilised.
59. As part of this process, TRA will consider the existence of competitive constraints (on a forward-looking basis). This is necessary to assess whether such constraints could be sufficiently homogeneous on a national basis and therefore whether the market may be national. For example, a full geographic analysis would not be considered necessary if:
 - service coverage is national;
 - pricing is national; and
 - there are no competitors with significant market share at a local level.
60. In this case the market can be assumed to be national. However, if there is evidence to suggest that significant competitive constraints exist at a more local level and that the market situation in a specific geographic area warrants geographical market analysis then further analysis would be considered necessary. In deciding whether further analysis is considered necessary TRA will have regard to various elements, including: the size of the specific geographic area; the materiality of the issues; the number and profile of customers in it; the costs and benefits of a geographic analysis; and the presence of alternative remedies available (including symmetric regulation).

Full geographic analysis

61. TRA will undertake more detailed geographic analysis if, having performed the preliminary analysis, it finds adequate preliminary evidence that the market may not be national. This would entail the following steps.
62. The first step is to select an appropriate geographic unit. This involves a trade-off between granularity and practicality. The geographic unit must be small enough that competitive conditions are unlikely to vary significantly within the unit, but large enough that the burden on operators and TRA with respect to analysing these markets is considered reasonable. TRA will in particular take into account the geographic scope of the relevant networks.
63. The second step is to consider in more detail the degree to which competitive constraints vary between these areas both currently and on a forward-looking

basis.¹⁸ This will be similar to the process undertaken at the preliminary phase but will be more rigorous and will entail collecting a larger quantity of data. This may then allow the areas to be grouped together into markets on the basis of the homogeneity of their competitive constraints.

2.4 Other market dimensions

64. As well as considering the limits of the market on the basis of the relevant products and geographic area, there are some other dimensions which may need to be taken into account. Where relevant, TRA will give consideration to the following issues.

Functional level of market

65. Since the market characteristics and competitive conditions will generally differ across the value chain in the telecommunications sector, it may be necessary to consider the functional level of the market, i.e. the stage it represents in the wider supply/value chain.
66. Typically, services are offered at two levels: the retail level (downstream) and the wholesale level (upstream). Further delineation within the wholesale level may be warranted. For example, unbundled local loops and bitstream access sit at different levels within the value chain and are therefore usually part of distinct wholesale markets.¹⁹
67. Markets for wholesale products need to be given special consideration. Since the demand for a wholesale input is derived from demand for an output at the retail level, consideration should be given to the retail product market when defining wholesale markets. This is because the substitution possibilities at the downstream point in the supply chain will influence the behaviour at the upstream level. For example, if narrowband and broadband services compete at a retail level, then wholesale narrowband and broadband access services may be considered to be part of the same market.

Bundled products

68. In some situations, products are sold together in a bundle and therefore the issue arises as to whether the bundle, composed of products which may not be substitutable from a demand-side, could be considered a product in its own right for the purpose of defining the market.²⁰ This will depend on potential consumer

¹⁸ When undertaking an ex-post assessment of market power, a forward-looking analysis may not be necessary.

¹⁹ See TRA, Dominance Determination in Wholesale Broadband Markets, 14 September 2009 and EC, Commission Recommendation on Relevant Product and Services Market within the electronic communications sector susceptible to ex-ante regulation in accordance with the Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services, 2007/879/EC of 17 December 2007.

²⁰ The EC recently provided some guidance on this issue, identifying the factors that National Regulatory Authorities in Member States should assess when considering whether bundled products form relevant product markets, see "*Accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, Second edition*", Section 3.2.

reaction to an increase in the price of the bundle and whether they would switch to consuming the products separately. This in turn may be related to the level of transaction costs that consumers would face in buying the products separately.

69. Product bundling is becoming prevalent within the telecommunications sector and therefore this may become an increasingly relevant issue. Examples include the bundling of mobile phones, minutes and texts in special deals, and providing fixed line telephony and broadband services together.
70. When determining if a bundle forms a relevant product market, TRA will consider factors such as:
- the potential extent of substitution between the bundle and buying the stand-alone products or services within the bundle. The greater the degree of substitution, the less likely that the bundle should be considered to form a separate market;
 - whether there is independent demand for individual components of the bundle; and
 - whether there are economies of scope in producing the bundle which mean that suppliers can provide the bundle more cheaply than the separate products or services. Where there are economies of scope, the bundle is more likely to be considered to represent a market in its own right.
71. In some instances, products which are not sold in a bundle may still be analysed together as part of a “cluster market”. Products can be grouped together into cluster markets for regulatory purposes where the benefits from analysing them separately are limited. TRA expects this to be more relevant for the purposes of ex-ante regulation.

Markets for different customer groups

72. Another issue that typically arises when defining relevant markets in the telecommunications sector is the degree to which services provided to residential and business customers form separate markets. A lack of sufficient demand- and supply-side substitution between services for business and residential consumers tends to imply that they belong to separate markets. For example, in its SMP designation in certain relevant retail markets issued in June 2008, TRA defined separate fixed narrowband access and domestic fixed calls markets for business and residential customers.²¹ Going forward, TRA will consider, on a case-by-case basis, whether it is necessary to define separate markets for individual customer groups.

²¹ TRA, Significant market power designation in certain relevant retail markets, A Determination, 3 June 2008.

3 ASSESSING MARKET POWER IN A RELEVANT MARKET

73. Within any market one or more firms may have a position of “market power”. This refers to the ability of a firm to behave independently of other firms and consumers, by raising the market price or restricting output for example. This behaviour can only be maintained if the level of competition is inadequate to safeguard the interests of consumers. Within the Telecommunications Law, market power is dealt with under the concepts of SMP and Dominance. Both terms and their meanings are well established within competition and regulatory economics.
74. This section describes how TRA will consider the extent to which any operator may have (or, for the purposes of ex-post competition inquiries, had) a position of dominance or SMP in the relevant market. As with the market definition exercise, there is a degree of judgement involved in assessing market power. The Guidelines therefore set out the conceptual framework which TRA will apply to determine whether one or more operators has or has had market power.
75. When performing an ex-ante assessment of the extent of market power the aim would be to understand how competitive the market is currently and whether this is likely to persist. For example, if changes are occurring in the market which would be reasonably be expected to improve competition over the timeframe of the analysis, then these should be taken into account. On the other hand, when performing an ex-post assessment, the aim would be to determine how competitive the market was at the time that the alleged anti-competitive behaviour took place, and since then, if relevant.
76. Whilst TRA will conduct an assessment of market power on a case-by-case basis, TRA will have regard to existing SMP or dominance determinations, notably to evaluate whether the factors underpinning an existing SMP or dominance determination are still applicable and/or have been impacted by market developments to such an extent as to modify the original finding.
77. The section begins by defining SMP and dominance based on the definitions given in the Telecommunications Law and outlines the implications of SMP and dominance designations. The Guidelines then outline how TRA will analyse the relevant competitive constraints in the market to assess whether any provider has market power. TRA will consider operators’ market shares and other relevant factors which are indicative of the level of competition within a market. A list of the potential factors TRA will consider is presented in this section. However, TRA will conduct each assessment on a case-by-case basis and therefore may not review all of the factors listed in this section.²² Instead, it will give consideration to the most relevant factors given the characteristics of the market analysed or the case. This section also sets out how TRA will treat existing regulatory obligations in its competition analyses. Finally, the Guidelines consider the concept of “joint dominance”, how it can arise and how it can be detected.

²² When determining whether an operator has SMP, TRA must assess the specific factors included in the definition of SMP given in the Telecommunications Law.

3.1 Relevant definitions

Single economic unit

78. The Telecommunications Law defines a Licensed Operator via reference to a Person, which may be a natural person, entity or public authority. It is important to recognize though that economic behaviour may not necessarily be constrained by the limits of these legal definitions. There might be cases where a group of persons will act as a single economic unit, such as when an entity adopts a company group structure.²³
79. Limiting the assessment of market power to formal legal formations or the attribution of specific actions or inactions to only some parts of an integrated economic unit could lead to erroneous conclusions.
80. International practice provides a wide body of jurisprudence related to the concept of a single economic unit, including the attribution of infringements to the parent companies for the actions (or inactions) of their subsidiaries as well as the treatment of agreements between parents and their subsidiaries.
81. According to European law, a parent company and its subsidiaries form a single economic unit when the subsidiaries do not enjoy real autonomy in determining their course of action in the market, but carry out the instructions issued by the parent company, which wholly controls them.²⁴ Agreement and practices between a parent company and its non-autonomous subsidiaries or between such different subsidiaries are not covered by the law related to restrictive agreements, at least when such agreements or practices are concerned merely with the internal allocation of tasks as between such persons.²⁵
82. Further, the EC is able to attribute actions (or inactions) of subsidiaries to parent companies (and impose fines accordingly). Based on case law from the European Court of Justice,²⁶ the fact that a subsidiary has a separate legal personality is not sufficient to exclude the possibility of imputing its conduct to the parent company. This may be the case in particular where the subsidiary, although having separate legal personality, does not decide independently upon its own conduct in the market, but carries out, in all material respects, the instructions given to it by the parent company. Similarly, based on case law from the European Court of Justice²⁷ it is legitimate to assume that the parent company exercises decisive influence over its subsidiary's conduct.
83. Where fines by the EC are imposed on a parent company and/or its subsidiary, they may be imposed jointly or severally.²⁸
84. TRA will analyse each case on its own merits. TRA will rely on established case law and is minded to follow the practice outlined above. TRA will therefore not consider it to be sufficient for a parent company to avoid responsibility for the

²³ The EU legal framework uses the term "undertaking" to cover such cases.

²⁴ See e.g. Case C-73/95 *Viho Europe v. Commission* [1996] ECR I-5457.

²⁵ Case 30/87 *Bodson* [1988] ECR 2479.

²⁶ Case 48-69 *ICI v. Commission* [1972] ECR 619.

²⁷ Case C-286/98P *Stora v. Commission* [2000] ECR I-9925.

²⁸ Bellamy, C. & Child G.D. (2001). *European Community Law of Competition*. London, Sweet and Maxwell.

actions of its subsidiary merely because such a subsidiary is a separate legal person.

85. To assist its assessment TRA will consider the following indicative and non exhaustive checklist according to which two entities are likely to form part of a single economic unit if one or more of the following conditions are met.²⁹
- (1) the subsidiary is wholly owned by the parent;
 - (2) the parent has a majority of voting rights, the right to appoint a majority of board members, and/or the right to appoint or otherwise control management;
 - (3) the parent issues very precise directions to the subsidiary;
 - (4) the parent has the right to approve all decisions within an area essential to the subsidiary's operations;
 - (5) the parent and subsidiary share a common marketing strategy or sales team;
 - (6) the two companies cooperate on a relatively permanent basis in other ways, such as the exchange of information, innovation, patents, and know-how;
 - (7) the parent and the subsidiary themselves consider that the subsidiary is not an autonomous entity; and/or
 - (8) the parent actually exercises its rights to control the subsidiary.

Market power

86. The Telecommunications Law differentiates between the concept of SMP and the concept of dominance. Article 1 of the Telecommunications Law defines an operator with SMP as:

“a Licensed Operator which holds 25% or more of the market share of the relevant market as determined from time to time by the Authority”.

87. The definition goes on to state that:

“When determining such matter, there shall be taken into consideration the ability of a Licensed Operator to influence market conditions, its turnover relative to the size of the market, its control of the means of Access to Users, its financial resources and its experience of providing products and services in the market. The Authority may determine that a Licensed Operator has significant market power even if such operator holds a share of less than twenty-five percent of the market or that it does not have significant power even if it holds more than such percentage.”

88. A Dominant Position is defined in Article 1 as:

“the Licensee's position of economic power that enables it to prevent the existence and continuation of effective competition in the relevant market through the ability of the Licensee to act independently – to a material extent – of competitors, Subscribers and Users”.

89. This definition of dominance is aligned with those used in other jurisdictions (such as the EU) for assessing ex-ante regulatory intervention and ex-post competition assessments.

90. Within the Telecommunications Law, findings of dominance and SMP impart different ex-ante regulatory obligations on affected operators. For example:

²⁹ See O'Donoghue and Padilla, *The Law and Economics of Article 82 EC*, 2006 at p622-623, Bishop and Walker, *The Economics of Competition Law*, 2nd edition.

- obligations in Article 57 relating to publishing an interconnection or access reference offer refer to operators with a dominant position (at the wholesale level); and
 - obligations in Article 58 relating to tariffs controls refer to operators with SMP (at the retail level).
91. Article 65, which describes prohibited anti-competitive conduct, refers to operators with a dominant position (which can be at the retail and wholesale levels).
92. TRA considers that, in effect, the concepts of SMP and dominance are similar and seek to capture similar types of behaviour, namely the ability of a firm to act independently of its competitors, its customers and ultimately of consumers, for example by sustaining prices above the competitive level. This interpretation is consistent with international best practice.³⁰ However, the legal definition of SMP in the Telecommunications Law places special emphasis on market shares while recognising the need to carefully consider the ability of an operator to influence market conditions, i.e. to act independently.

3.2 Assessing the level of competitive constraints in a market

93. Market power generally derives from a combination of several factors which, taken in isolation, may not necessarily be determinative. The main factors TRA would typically consider when assessing market power can usefully be grouped as follows:
- the market shares of individual entities;
 - other competitive constraints (primarily constraints from existing competitors, constraints from potential competitors, barriers to entry and expansion in the relevant market and the degree of countervailing buyer power); and
 - evidence on behaviour and performance.
94. These factors are discussed in detail below.

Market share

95. The market shares of individual firms can provide an indication of the potential extent of their market power. For example, all other things remaining the same, a firm with a relatively high market share may be more able to set prices above the competitive level than a firm with a relatively low market share.
96. In the Telecommunications Law, the finding of SMP is based on a market share threshold of 25%, providing this is supported by other evidence. Although there is no similar threshold for dominance, best practice and case law in other jurisdictions provides some guidance. For example, European case law has established a presumption of dominance where an operator has a market share in excess of 50%.³¹ It is still possible to find a firm with a market share less than 50% which is

³⁰ For example, the regulatory framework governing the EU telecommunications sector considers the concept of SMP to be equivalent to that of dominance.

³¹ In Case C-62/86, AZKO Chemie BV vs. Commission (1991), the European Court of Justice considered that a market share of 50% could be considered to be very large such that, absent exceptional circumstances, an undertaking with such a market share would be presumed dominant.

dominant, although there are few cases where this has occurred when the operator's market share is below 40%.³² Significant capacity constraints may play a role in this context.

97. Market shares may be calculated based on volume or value measures of performance. Volume measures should just relate to sales of the relevant product to customers in the relevant market. Value measures should be valued at the price paid by the operator's direct customers. The most appropriate measure depends on the type of product and it is likely that bulk wholesale products will be best considered on the basis of share of market volumes. Meanwhile, differentiated retail products will be best considered on the basis of share of market revenues.
98. While market shares may be indicative of market power and provide an indication of market concentration, they should be analysed in the context of market conditions. It is important to consider the evolution of market shares over time, as a persistently high market share makes it more likely that an entity has market power. Similarly, a persistently low market share is more suggestive of a lack of market power. Relative market shares can also be important. For example, a high market share may be more indicative of market power if all of the competitors' market shares are very low. Other patterns in market share data can be insightful. If market shares have been consistently volatile, this might indicate constant innovation which suggests that competition is effective. Also if recent entrants with low market shares have subsequently grown rapidly and attained relatively high market shares, this might indicate that barriers to expansion are low. This again suggests that competition is present in the market and therefore operators are constrained by market forces. In addition to the dynamics of the market it is important to consider the extent to which products are differentiated.

Other competitive constraints

99. Assessing the existence of SMP or dominance in the market is not just about market shares. Other indicators need to be considered in order to determine whether an operator possesses either form of market power. Indeed, the Telecommunications Law lays out specific indicators which should be considered when assessing SMP, namely:
 - a firm's turnover relative to the size of the market;
 - its control of the means of Access to Users;
 - its financial resources; and
 - its experience of providing products and services in the market.
100. TRA considers that the first of these (a firm's turnover relative to the size of the market) is adequately captured by an analysis of a firm's market share (using a value measure) and therefore this indicator is not considered further here. When assessing SMP TRA will have regard to the factors listed above, together with any other factors which it considers relevant in the particular case.
101. The rest of this section sets out the potential competitive constraints which are typically considered by regulatory and competition authorities when assessing whether an operator possesses SMP or is dominant. The type of evidence that

³² For example, the EC's decision on British Airways/Virgin, which was upheld by the European Court of Justice in Case C-95/04 P (2007) marked the first time an undertaking with a market share less than 40% (in this case, 39.7%) was found to be dominant under Article 82.

could be used to determine whether each constraint exists is also discussed. The competitive constraints can be conveniently grouped into the following categories:

- constraints from existing competitors;
- constraints from potential competition (barriers to entry and expansion); and
- countervailing buyer power.

102. It should be noted that, other than the indicators mentioned in the definition of SMP included in the Telecommunications Law, the factors described in each of these categories do not constitute a “checklist” that TRA will in all cases consider when assessing market power. Rather, assessing dominance and SMP involves an informed assessment of all relevant factors, which can vary from market-to-market, because of market characteristics, the facts of the case and the data and evidence available.

Existing competition and the conduct of market players

103. If competition is fierce, high market shares may not be a cause for concern. For example in an oligopolistic market, although there are few competitors, competition can be effective. This could be assessed by reviewing the evolution of prices of all of the operators over time. In addition, consideration should be given to the underlying costs and hence whether prices are being pushed towards the competitive level. Commercial strategies and the extent to which products are differentiated may also be relevant considerations as non-price competition may be significant.

Barriers to entry and expansion

104. Barriers to entry occur when an operator has an advantage over potential entrants. They are factors which prevent or deter the entry of new firms even when incumbent firms are earning excess profits. They may make new entry into the market less likely or less rapid by affecting the costs associated with entry and / or the expected profits once entry has occurred. Alternatively, by establishing physical, geographic, or legal obstacles they may prevent entry entirely.

105. Barriers to expansion are similar but relate to the ability of a new or existing entrant to expand and increase the scale of their production.

106. The lower these entry barriers are, the higher the risk of entry for incumbents and the more likely that they will be unable to maintain prices and profits above the competitive level. It is therefore feasible that an operator with a high market share would not possess market power if it faced sufficiently low entry barriers. Conversely, if entry barriers are high enough, operators already within the market will be protected from potential entry and may therefore be insulated from competitive pressures. The higher barriers to expansion are the more difficult it would be for a new or existing operator to remain in the market and to compete vigorously. At one extreme, the scope for potential competition may be inexistent or very limited. Barriers to entry may also be “absolute”.

107. There are many different sources and types of barriers to entry and expansion, the most common of which are discussed below. Other examples include: network effects; switching costs; patents; and law and regulations that may restrict entry.

Access to important assets or resources, including users

108. If an operator has access to important assets or resources which others are excluded from, and these assets or resources cannot reasonably be replicated this

will provide them with a strong advantage. This will therefore make it difficult for a new entrant to compete. Examples include owning an access network, controlling access to customers,³³ having a highly developed distribution and sales network and owning spectrum licences. In addition, intellectual property rights, if central to the provision of the relevant product or service can provide a similar benefit to the incumbent.

Access to finance

109. An existing operator may have better access to finance, due to its track record or by virtue of its longer presence in the market or its size. It could therefore be difficult for a new entrant to obtain the necessary financial backing to enter the market.³⁴

Experience of providing the products and services

110. The first firm to enter a market may gain a number of first mover advantages which subsequently can act as barriers to entry. These may include the incumbent in the market having access to more information on existing costs of production, greater experience in offering the services,³⁵ and more generally, greater information on the market and market dynamics.

Vertical integration

111. In certain circumstances, vertical integration can lead to market power in a downstream retail market. This is particularly the case where a firm has the ability to leverage market power from an upstream market into a related downstream market. For example, if appropriate “fit for purpose” wholesale products are not made available by the integrated entity to non-integrated competitors, then the retail market can be effectively foreclosed.

Sunk costs

112. If market entry is associated with high levels of sunk costs then potential new entrants may be deterred. Sunk costs are those initial costs which must be incurred in order to enter the market and become a credible supplier but which cannot be recovered upon exit. For example, investment in certain infrastructure may be required – e.g. the new entrant could incur costs associated with digging trenches, which could then not be recouped. Alternatively, upfront marketing costs may be incurred in order to generate brand awareness and offset brand loyalty towards the incumbent. Therefore, when making such “sunk” investment the new entrant is taking a risk. Only if the expected profits exceed any necessary sunk costs would a company be prepared to enter.

Economies of scale

113. Economies of scale occur when the average cost of a product or service falls as output rises. The presence of significant economies of scale relative to the overall size of the market, in the provision of the relevant product or service can act as a barrier to entry. This will mean that a new entrant may need to enter at a large scale in order to achieve cost levels comparable with the current operators. Large scale entry, relative to market size, in turn may require relatively large sunk costs. Consequently, new entry may not be feasible as the new entrant could suffer from

³³ Note that under the definition of SMP given in Telecommunications Law this specific barrier must be considered when assessing existence of SMP.

³⁴ Note that under the definition of SMP given in Telecommunications Law this barrier must be considered when assessing existence of SMP.

³⁵ Note that under the definition of SMP given in Telecommunications Law this specific barrier must be considered when assessing existence of SMP.

a cost disadvantage which would impair its ability to compete with existing operators.

Economies of scope

114. Economies of scope occur when the average costs of producing a product or service are lower when it is produced jointly with another product or service than if it is produced separately. This may be due to the use of certain common production processes, the costs of which can then be spread across both products. Entrants may not be able to compete if they are unable to replicate the “joint production process” employed by incumbents. They would therefore be unable to achieve the same economies of scope and such low unit production costs. A number of telecommunications products and services are characterised by the existence of both economies of scale and scope.

Technological advantages or superiority

115. Incumbent entities may, as a result of experience or effective R&D, have discovered techniques which result in greater productive efficiency. Without access to such techniques, new entrants may not be able to achieve the same low costs of production.

Reputation for predatory pricing

116. A reputation for predatory pricing by incumbents in the past may make new entrants wary of trying to enter the market and compete with the current operators. This is because they fear losses that would result from a predatory strategy which could be implemented by the incumbent in response to market entry (a detailed explanation of predatory pricing is provided in section 5.2).

Barriers to expansion

117. Some of the factors described may exist but not to a sufficient extent as to create a barrier to entry. Instead they may create a barrier to expansion, meaning that although new entrants can enter the market, they may then struggle to grow beyond a relatively small scale, for example because of constraints on distribution networks. This may make them less of a serious competitive threat to the larger original market players.

118. When considering the extent of barriers to entry and expansion TRA will have regard to information available in the public domain and also to information provided by incumbents and (potential) new entrants. It will then assess this information, and use it together with its own knowledge, to reach a conclusion on the significance of barriers to entry and expansion. For example, TRA may consider:

- the magnitude of sunk costs of entry;
- the ease of obtaining inputs;
- the ease of setting up distribution;
- the cost of operating at the minimum viable scale of production; and
- the ease of expanding operation.

119. In addition, it might be beneficial to consider the extent to which new entry has occurred historically as this provides evidence that entry has been possible. However, the prospective rate of growth and innovation are also relevant. If the market is expected to grow then the opportunities for entry are likely to improve. Similarly if further innovation is likely, it is more likely that current barriers may become surmountable.

Countervailing Buyer power

120. Countervailing buyer power refers to the ability of buyers to limit the ability of sellers to exercise market power. If sufficient countervailing buyer power exists, it can help to offset the market power of the sellers.
121. The existence of buyer power is most evident where buyers and sellers have to negotiate. This may occur for example when operators acquire wholesale telecommunications services or large purchasers such as corporate organisations (rather than individuals) buy telecommunications services at the retail level.
122. Countervailing buyer power is not an absolute concept but refers to the relative strength of the buyer in negotiations with prospective sellers. The extent of buyer power therefore relates to the degree of bargaining power that buyers have over the price, quality, or terms of supply of a product or service. Certain conditions are likely to enhance countervailing buyer power. The most important of which include:
- the buyer has alternative choices;
 - the buyer is well informed about alternative sources of supply;
 - the buyer could switch to alternative sources of supply without incurring significant costs;
 - the buyer could produce the input itself or “sponsor” new entry by another supplier; and
 - the buyer is an important outlet for the seller and therefore the seller would be prepared to negotiate – i.e. limited alternative buyers.

Evidence on behaviour and performance

123. As well as looking for evidence of the existence of competitive constraints, it is also helpful to look for evidence that competitive constraints have or have not been effective. This may assist in assessing whether the operators within the market do or do not possess market power.

Evidence on prices

124. Prices that have significantly and consistently exceeded a relevant measure of costs suggest that competition has not been effective. This can mean that an operator has been able to charge prices above the competitive level. TRA may obtain and analyse data on prices and underlying costs in order to analyse whether this is the case. See Annex 1 for more details about measuring cost and profitability in the telecommunications sector. It is, however, important that prices are persistently and significantly above costs. A temporary price increase will not necessarily have been caused by a lack of competition.

Evidence on profits

125. Another related source of evidence for assessing whether competition in the market is effective is profitability. If, historically, the profits of the industry and/or of specific firms have consistently exceeded (and may be reasonably anticipated to continue to exceed) the level expected in a competitive market with similar levels of risk and innovation, then this could also be indicative of ineffective competition. When looking at profitability, it is essential to consider a sufficiently long time horizon, i.e. the life cycle of the product, in order to obtain an accurate picture. High profits at a particular point in the lifecycle of a product may be consistent with the outcome of a normal competitive process. Annex 1 provides a detailed exposition of how profitability may be measured for the purposes of assessing the level of competition.

3.3 The treatment of existing regulatory obligations in competition analyses

126. The treatment of existing regulatory obligations in competition analyses will depend on whether the analysis is conducted on an ex-post or ex-ante basis.
127. When assessing market power on an ex-post basis, TRA will take into account the impact of existing regulation.
128. By contrast, when assessing the level of competition for the purposes of regulation in a market where regulation is already in place, TRA will conduct its analysis as if there was no SMP/Dominance related regulation affecting the relevant market. If such regulation was in place in the relevant market and was generating a competitive market outcome, then an inappropriate conclusion could be reached regarding the existence of market power. A mode of analysis where such regulatory constraints are discounted called the “Modified Greenfield Approach” was adopted by the EC in its decision on fixed call termination in the German market. In that decision, the EC states that:³⁶

“The purpose of a Greenfield approach is indeed to avoid circularity in the market analysis by avoiding that, when as a result of existing regulation a market is found to be effectively competitive, which could result in withdrawing that regulation, the market may return to a situation where there is no longer effective competition. In other words, any Greenfield approach must ensure that absence of SMP is only found and regulation only rolled back where markets have become sustainably competitive, and not where the absence of SMP is precisely the result of the regulation in place. This implies **that regulation which will continue to exist throughout the period of the forward-looking assessment independently of a SMP finding on the market concerned must be taken into account.**” (Emphasis added)

129. In addition, when assessing the level of competition in a retail market (or other downstream market) on an ex-ante basis, TRA will take into account the role of wholesale regulation and its impact on downstream (retail) competition.³⁷ TRA does not consider that, as a matter of course, the imposition of ex-ante regulation in wholesale markets will automatically prevent a vertically integrated operator from holding a dominant and/or SMP position in related retail markets. For example, TRA notes that in numerous jurisdictions (including EU Member States), incumbent operators have been found to have SMP or be dominant in certain retail markets, despite having to offer regulated wholesale access to parts of their networks. For example, in the United Kingdom (UK), Ofcom continued to impose retail price controls on BT’s fixed line services, even though BT offered regulated wholesale line rental and indirect access call services, only relaxing retail regulation when BT’s wholesale line rental service was considered fit for purpose.³⁸

3.4 Joint or collective dominance

130. It is also possible for two or more firms to achieve dominance jointly. Joint dominance allows multiple companies within a market to align their behaviour, in order to achieve a more profitable outcome for themselves – i.e. they are able to “tacitly collude” and therefore behave independently of other suppliers and

³⁶ Commission decision of 17 May 2005, Case DE/2005/0144, C(2005) 1442 final Paragraph 23

³⁷ TRA did so in the June 2008 SMP Determination.

³⁸ See Ofcom, Retail price control statement – July 2006.

consumers.³⁹ However, this is not the same as overt collusion where competitors actively meet and plan their commercial strategies in order to allocate the market between them. “Tacit collusion” occurs when competitors become aware of the interdependence of their actions. Consequently they independently determine that the payoff they could achieve from following a certain strategy will benefit both parties. This apparently “co-ordinated” behaviour results in the best outcome for all of the entities involved and none of them has an incentive to divert from it. Certain market conditions make joint dominance more probable. They include:

- Operators have incentives to maintain coordinated behaviour – this is more likely when:
 - the firms are symmetric – i.e. have similar cost structures;
 - the firms’ market shares are similar;
 - the number of firms in the market is small; and
 - barriers to entry exist.
- Operators are able to monitor the behaviour of others – this is more likely when:
 - the market is stable;
 - prices are transparent; and
 - the product is simple and has few dimensions on which firms can compete.
- A credible punishment mechanism exists, which means that one party can punish the other(s) for diverting from the co-ordinated strategy. Put differently, it would not be in the interests for either party to divert – for example, if market capacity is flexible one party could increase output and reduce prices, thus forcing its competitor out of the market.

131. The case study described below gives an example of a finding of joint dominance in the mobile market by the Spanish telecommunications regulator (CMT).

Case study: Joint dominance in the Spanish mobile market

Under the EU framework for electronic communications, national regulators are required to conduct regular reviews of markets which the EC considers may be susceptible to ex-ante regulation. The EC included the market for access and call origination (market 15) in its original Recommendation on relevant markets, thus requiring NRAs to review the extent of competition in this market.

In the first round of market analysis, the Spanish telecommunications regulator, CMT, identified Movistar, Orange and Vodafone as holding a position of joint dominance in the market for access and call origination on public mobile networks.⁴⁰ The evidence to support this conclusion was as follows:

- small number of competitors and high degree of market concentration;

³⁹ The framework for finding collective dominance was established in *Airtours Plc vs, European Commission*, [2002] ECR II-258.

⁴⁰ See CMT, Notification of Draft Measures pursuant to 7(3) of the Directive 2002/21/EC for access and call origination on public mobile telephone networks - ES/2005/0330. Note that at the time of writing this market was due to be reviewed for a second time under the EU framework and therefore this decision could be superseded.

- market transparency;
- existence of absolute barriers to entry;
- lack of potential competition;
- mature market in terms of penetration with growing traffic/use;
- homogeneous product;
- frequent interaction between competitors;
- empirical evidence of a lack of MVNOs;
- existence of a retaliation strategy consisting of granting access to other operators in response to a deviation from the common strategy;
- existence of incentives to co-ordinate; and
- stability of the position of joint dominance.

As a result, the regulator imposed an obligation on the three operators to offer access to their networks for the provision of retail mobile access and origination. More specifically, CMT required:

- operators to consider all reasonable requests for access and use of specific network elements; and,
- prices for the provision of access services to be reasonable.

3.5 Ex-ante remedies and periodic review of market determinations

132. In line with its general duties under the Telecommunications Law, TRA seeks to identify and define appropriate and proportionate remedies where an operator is determined dominant or to hold SMP following an ex-ante review of markets. Articles 57 and 58 trigger specific obligations at the wholesale and retail levels respectively. When defining remedies, TRA has regard to the (potential) competition and regulatory problems identified through its analysis of competition.
133. In order to adjust regulation over time to the level of competition TRA reviews periodically its market determinations when market developments warrant it.

4 ANTI-COMPETITIVE PROVISIONS OF THE TELECOMMUNICATIONS LAW

134. This section considers the various potential forms of anti-competitive conduct which could result in a breach of the relevant provisions of the Telecommunications Law. It first sets out the anti-competitive provisions in Article 65 of Telecommunications Law before defining the elements required to establish a breach of Article 65. It then outlines the potential forms of anti-competitive conducts and the consequences of a finding of abuse of dominant position.
135. The Guidelines focus on abuses of dominant position as there are a particularly thorny issue in the telecommunications sector, especially at a time when de-regulatory steps are implemented. Allegations of abuses of dominant position are also the most likely complaints for anti-competitive behaviour and accordingly Guidelines that place emphasis on abuses of dominant position should be particularly useful to market players and other stakeholders. Other anti-competitive practices, such as collusive agreements and changes to market structure that raise competition concerns are only very briefly touched upon.⁴¹

4.1 Article 65 of the Telecommunications Law

136. Article 65 of the Telecommunications Law includes provisions outlawing anti-competitive behaviour in the telecommunications sector. Article 65(a) states that:

“A Licensed Operator shall not do or omit to do anything which has the effect of materially preventing, restricting or distorting competition in any commercial field connected with Telecommunications in the Kingdom, where such act or omission is done in the course of operating a Telecommunications Network or providing a Telecommunications service, or in connection with any such matter.”

137. Further, Article 65(b) defines the acts or omissions referred to in Article 65(a) as follows:

“1. Abuse by the Licensed Operator, either independently or with others, of a Dominant Position in the market or in a substantial part of it which materially prevents or limits competition in a market;

2 Concluding any agreement or entering into any arrangement or understanding, or the carrying on of any concerted practice, with any other Person which has the effect of preventing, restricting or distorting competition in the market; or

3. Effecting anti-competitive changes in market structure, in particular anti-competitive mergers and acquisitions in the Telecommunications sector.”

138. In accordance with Article 65(d), “TRA shall, when determining whether an act of omission (whether ongoing or temporary) constitutes anti-competitive conduct, have regard to the provisions of the Law and to the conditions of the Licence of the Telecommunications operator.”⁴²

⁴¹ The Telecommunications Mergers and Acquisitions Regulation issued by TRA in 2004 sets how TRA reviews mergers and acquisitions involving licensed operators. At the time of writing it remains in effect.

⁴² At the time of writing the anti-competitive practices contained in the licenses include: anti-competitive cross-subsidization; abuse of dominant position; exclusive arrangements; agreements, arrangements or undertakings to fix or restrain competition; anti-competitive use of information obtained from operators; anti-competitive retention of technical and other commercially relevant information necessary for the provision of telecommunications services; and undue discrimination.

139. Investigations into potential breaches of Article 65 can be launched by TRA on its own initiative as well as in response to complaints received.

4.2 Elements required to establish a Breach of Article 65

140. Consistent with the wording of Article 65, TRA considers that there are three main elements required to establish a breach of Article 65:
1. **Dominance** - in the case of Article 65(b)1, that the licensed operator has a dominant position in a relevant market;
 2. **Anti-competitive conduct** - that the Licensed operator has engaged in some form of anti-competitive behaviour; and
 3. **Effect on competition** - that the conduct has had the effect of materially preventing, restricting or distorting competition.
141. Put slightly differently, to establish an abuse of dominant position, the following ingredients are required:
- Identification of relevant markets;
 - Dominance in one or more markets;
 - Anti-competitive conduct (linked to the relevant market(s)); and
 - Material effect on competition.
142. The “theory of harm” or “story” provides the articulation between these various elements.
143. To define the relevant market and to establish whether a licensed operator has a dominant position in a relevant market TRA will follow the procedures described in sections 2 and 3 of these Guidelines.
144. With regards to the second element of Article 65(b), the forms of behaviour that TRA considers may constitute anti-competitive conduct are described further in the remainder of this section.⁴³ However, each case will be analysed on a case-by-case basis based on the relevant facts.
145. TRA will also need to establish the materiality of the resulting impact on competition and hence consumer harm. Anti-competitive behaviour hinders the normal competitive process and as a result deprives consumers from the benefits that well functioning competitive markets deliver, such as productivity gains, choice, innovative services and lower prices. Anti-competitive conduct would be expected to lead to restrictions and distortions of competition which in turn adversely impact consumer welfare.
146. To analyse the materiality of the impact on competition, TRA does not propose to adopt a single test or definition of materiality. Rather, it proposes to consider, on a case-by-case basis, the likely or apparent impact of the alleged anti-competitive behaviour in order to assess whether, in the absence of the alleged breach, the

⁴³ The forms of anti-competitive conduct discussed in these guidelines are not exhaustive.

outcome arising in the relevant market would be substantially different. For this purpose, TRA will take into account factors including, but not limited to:

- the duration of the alleged breach (e.g., TRA may generally not be inclined to investigate alleged anti-competitive behaviour related to an isolated single day promotion);
- changes in market shares over the period of the alleged breach (for example, whether previous market share trends have been reversed or new entrants have begun to lose market share)⁴⁴;
- changes in market structure over the period of the alleged breach (i.e., whether exit has occurred or expected entry has failed to materialise);
- the likely development of barriers to entry or expansion (e.g. if they are expected to decline then potentially anti-competitive conduct may not be sustainable); and
- the potential impact of the alleged breach on barriers to entry and expansion in the market (i.e., TRA may consider a breach has a material impact if it increases barriers to entry, even if it has yet to significantly affect market share).

4.3 Efficiency claims

147. In line with TRA's general duties under Article 3(b) and in particular its duties to protect the interests of consumers and to promote effective and fair competition, TRA intends to consider efficiency claims in response to allegation of anti-competitive behaviour. In this balancing act, TRA intends to consider: whether the efficiencies or benefits result from the conduct; whether the conduct is indispensable to realise those efficiencies or benefits; and whether the conduct does not result in a substantial reduction of competition.

4.4 Potential forms of anti-competitive conduct under Article 65(b)

148. According to Article 65(b), anti-competitive conduct may take the form of:

- Abuse of a dominant position, either independently or with others (65(b)1);
- Concluding any anti-competitive agreement or entering into any arrangement or understanding (65(b)2); and
- Effecting anti-competitive changes in market structure, through in particular mergers and acquisitions (65(b)3).

149. As explained in paragraph 135 the Guidelines focus on abuse of dominant position, i.e. on Article 65(b)1 and in particular on unilateral anti-competitive conduct. Hence, collusive agreements / concerted practices and mergers and acquisitions are covered briefly.

⁴⁴ However, this is only a relevant indicator when sufficient time has elapsed between the alleged breach and the TRA's investigation for market shares to have responded.

Concerted practices - Article 65(b)2

150. Article 65(b)2 of the Telecommunications Law covers collusive agreements, arrangements, understandings or other concerted practices which may prevent, restrict or distort competition. Dominance is not required for this provision. Unlike tacit collusion (joint dominance) discussed in the previous section, such collusive agreements are explicitly arrived at by the firms concerned.
151. Such agreements could cover a wide range of factors. However, regardless of the precise form of the agreement, all may cause consumer detriment through limiting (or in extreme cases, eliminating) competition in the market under consideration. For example, agreements could cover:
- fixing prices, whereby parties to the agreement decide the prices they will charge for a given product;
 - fixing total industry output, whereby the parties agree to produce a given level of output in order to control the price of the good;
 - agreeing market shares, whereby the firms agree to split the market and hence do not compete for new customers (for example by reducing prices) or to expand their market shares beyond the agreed level; or
 - agreeing the allocation of customers, territory, or the division of profits, so as to avoid competition between the parties to the agreement.
152. Whilst TRA does not cover such agreements in detail in these Guidelines, it reiterates that operators who do take part in joint agreements, arrangements or practices which are not covered by Article 65(c) of the Telecommunications Law shall be considered to be in contravention of Article 65(b)2. For the avoidance of doubt, under Article 65(c), such agreements or concerted practices can only be justified where they result in:
- “improving the provision of any goods or services or promoting technical or economic progress in the Kingdom if the Subscribers and Users have a reasonable share of the resulting benefit, provided that:
1. no restrictions other than those indispensable to attaining those objectives shall be imposed on the Subscribers and Users; and
 2. the act or omission shall not substantially reduce competition in the market for the relevant goods or services.”
153. In examining agreements or concerted practices pursuant to Article 65(c), TRA is minded to use a factual and counter-factual analysis to assess notably their impact on competition. TRA will identify the benefits and the extent to which they accrue to Subscribers and Users. TRA will also assess whether the restrictions are indispensable to the realisation of the benefits identified.
154. TRA may, at its own discretion, be more lenient towards the person(s) involved in a concerted practice that come forward with information about the concerted practice and co-operate fully with TRA in its investigation and prosecution of the concerted practice. TRA intends to explore further the possibility of developing a leniency programme consistent with local Bahraini Administrative Law which may become part of the fining guidelines. In the meantime, TRA will retain its discretion to be lenient towards the first person(s) that come forward and fully cooperate with TRA, although leniency should not automatically be expected.

155. The case study below provides an example of a collusive agreement between mobile operators in France.

Case study: Collusive agreements in the French mobile market⁴⁵

In 2005, following an ex-post investigation covering the period 1997 – 2003, the French Competition Authority (Conseil de la Concurrence) found the three French mobile network operators (SFR, Orange and Bouygues Telecom) guilty of collusive market behaviour which had the impact of distorting and reducing market competition. As a result, the mobile operators were jointly fined a total of over €500 million.

In its investigation, the Council (Conseil) found the operators had engaged in two anti-competitive collusive agreements:

- An agreement to share information on new subscribers and disconnections (covering the period 1997 – 2003); and
- An agreement to stabilise market shares based on jointly agreed targets (covering the period 2000-02).

Sharing information about new subscribers and disconnections

The mobile operators were found to have exchanged, every month, information on the number of their new customers disconnections. The Council considered for the following reasons that sharing this information was likely to reduce competition:

- Operators would not have been able to gain access to this information for other providers had they not agreed (secretly) to share it;
- Based on information taken from the minutes of meetings between operators, the Council concluded that the information shared was extremely important for the operators and was taken into account when commercial strategies were chosen. In addition, sharing this information was likely to reduce an operator's uncertainty over its rivals' potential strategies and ultimately reduce each operator's independence.

In addition, the Council noted that from 2000-02, this practice of information sharing enabled the operators to monitor a separate agreement on market shares.

An agreement to stabilise market shares

Between 2000 and 2002, the three operators also engaged in an explicit market sharing agreement, whereby the providers agreed to maintain their market shares at existing levels. Rather than competing to win new customers, the Council found that this led to the operators trying to consolidate their existing customer bases, resulting in (amongst other things) an increase in prices and consumer detriment (because, in the absence of the agreement, an operator would not have been able to sustain a unilateral increase in prices).

As part of its investigation, the Council found documentary evidence attesting to the agreement. In addition, it also observed behavioural evidence of collusion in the

⁴⁵ See Conseil de la Concurrence, Décision du 30 novembre 2005 relative à des pratiques constatées dans le secteur de la téléphonie mobile, for more information.

commercial policies of the operators over the period, including simultaneous changes in the structure of charging for mobile calls.⁴⁶

Effecting anti-competitive changes in market structure – Article 65(b)3

156. Article 65(b)3 relates to mergers and acquisitions which may have anti-competitive effects in the market. TRA has previously published its mergers and acquisitions regulation which set out how it reviews mergers and acquisitions involving licensed operators.⁴⁷ Dominance is not a requirement for this provision. At the time of writing this regulation remains in effect and is not superseded by the Competition Guidelines.

Abuse of a dominant position – Article 65(b)1

157. Unilateral anti-competitive behaviour may be split into two categories:

- Exploitative conduct such as charging excessively high prices to consumers or using a position of market power to reduce payments to suppliers.
- Exclusionary conduct which may remove or reduce existing and potential future competition in a relevant market, for example either through weakening existing competitors, establishing barriers to entry or foreclosing the market. Examples of such behaviour include setting predatory prices as well as creating constraints such as physically refusing to supply a critical input to a (potential) downstream competitor or affecting a margin squeeze.

4.5 Potential consequences of breach of Article 65

158. When an operator is determined by TRA to have acted anti-competitively, TRA may, according to Article 65(f):

- impose a remedy to redress, amend or prevent the breach;
- impose a fine on the operator up to 10% of its annual revenues.

159. As remedies for breaches of Article 65 will, to a large extent, be case specific, TRA does not see merit in developing specific guidance on remedies.

160. However, TRA intends to develop a separate set of guidelines which will explain how fines in relation to breaches of Article 65 will be set. In the absence of any fining guidelines or principles, TRA will consider the principles set out in previous TRA decisions and international practice.

⁴⁶ In 2007, the Cour de Cassation, the highest jurisdiction in France, confirmed the second issue (i.e. the agreement to stabilise market share) and sent to the Appeal Court the first issue. See Cour de Cassation, Arrêt du 29 juin 2007.

⁴⁷ See TRA, Telecommunications Mergers and Acquisitions Regulation, Regulation 3 of 2004.

5 POSSIBLE FORMS OF ABUSE OF DOMINANT POSITION

161. In this section, TRA considers both exploitative and exclusionary behaviour and discusses the main types of anti-competitive behaviour which are likely to be most relevant in the telecommunications sector, namely:

- Excessive pricing;
- Predatory pricing;
- Margin squeeze;
- Anti-competitive bundling or tying;
- Price and non-price discrimination;
- On-net /off-net price differentiation;
- Refusal to supply; and
- Long term contracts.

162. In each case, the conduct is defined and an explanation of the circumstances under which it may be anti-competitive is given; the types of evidence which would be required to establish that such anti-competitive conduct had occurred is then described and an indication of the types of information that TRA would seek to obtain to assess a breach is given.

163. For the avoidance of doubt, however, this list does not prevent TRA investigating and / or stakeholders submitting complaints about potential breaches of Article 65 through other forms of anti-competitive behaviour.

164. When considering potential abuse of a dominant position, it is essential, but often difficult, to distinguish between aggressive competitive and anti-competitive behaviour (e.g., whether significant price reductions constitute anti-competitive behaviour or a pro-competitive response to changing market conditions). However, in conducting any assessment of anti-competitive behaviour, TRA considers that its role is to protect and enhance the competitive process, rather than to protect individual competitors.

5.1 Excessive pricing

Description of behaviour and possible effects

165. The ability to charge excessively high prices could arise as a result of a dominant position in a market. In this context, “excessively high” means substantially higher than would be expected in a competitive environment. There are generally two forms of excessive pricing:⁴⁸

- ‘exploitative’ abuse refers to the case where a dominant firm directly exploits its dominance by charging high prices to its customers for example; and
- ‘exclusionary’ abuse relates to setting high prices in one market for example in order to strengthen or maintain a dominant position in another market.

⁴⁸ See Motta & Destreel (2003), ‘Exploitative and Exclusionary Excessive Prices in EU Law’.

166. In the context of telecommunications, an “exploitative” excessive price may refer to excessive pricing at the retail level and hence consumers facing unreasonably high prices. An “exclusionary” excessive price might refer to excessive pricing at the wholesale level, potentially resulting in a form of market foreclosure (through raising a rival’s costs).

Evidence required

167. In order to assess whether prices are or have been excessive, TRA may compare current price levels to an appropriate benchmark. A range of potential evidence may be considered including price levels in other periods when competition was considered to be more intense or price data from another jurisdiction, if considered relevant and appropriate. A more reliable basis of comparison, however, would be to compare prices to a relevant cost benchmark and to consider whether the operator concerned has generated excess profits over the relevant time horizon. Alternatively or in addition to this, profit data may be examined directly for evidence that profits have exceeded the level expected in a competitive environment.
168. Assessing the existence of excessive pricing is a non-trivial task as many factors may have generated the observed price levels and their effects may be difficult to disentangle.⁴⁹ Hence in assessing the outcome of an analysis of prices or profitability, TRA will consider whether excessive pricing is the most likely explanation. Other potential reasons why prices or profits may appear to be high but are not actually excessive include:
- a positive demand shock (leading to a temporary increase in price);
 - a negative supply shock (leading to a temporary increase in price); or
 - successful innovation (resulting in a justifiable reward for risk).
169. It is important that prices or profits are reviewed over a sufficient period of time. If they appear to be persistently high then there is more likelihood that this can be explained by prices being set and maintained above the competitive level as a result of market power.
170. In summary, therefore, TRA is most likely to compare historic and current price data to the relevant underlying historic and current cost data and look for evidence of prices being persistently higher than the level that would be expected to prevail in a competitive market. In relation to profit, TRA will examine whether the actual level of profit is persistently higher than the level of profit that the company would be expected to make in a competitive market, as proxied by an appropriate level of the cost of capital of the company. TRA will be inclined to use the weighted average cost of capital (“WACC”) as the measure of expected return, but will consider other measures as well, if appropriate (for example, if data is not available to calculate the rate of return on capital employed).
171. However, given the empirical difficulties associated with identifying excessive pricing, TRA would exercise caution when performing such an analysis in order not to chill innovation or limit dynamic efficiency.

⁴⁹ See e.g. Evans & Padilla (2005), ‘Excessive Prices: Using Economics to Define Administrable Legal Rules’.

5.2 Predatory pricing

Description of behaviour and possible effects

172. Predatory pricing is a short-term strategy of lowering prices below costs in order to weaken a rival and potentially force them to exit the market or to prevent new entry into the market. Prices are then subsequently increased in order to recoup losses. Over the longer term, if effective, predatory pricing can lead to a reduction of competition in the relevant market. Therefore it can result in a loss of consumer welfare as prices, which were temporarily lowered, can then be increased above the competitive level.
173. The rationale for a dominant firm to follow such a strategy may be to protect its position within the market and its long term profitability. Although initially consumers would face lower prices, which could be viewed as a beneficial outcome, in the long term prices will increase above the competitive level due to a lack of competitive pressure on the predatory firm. Hence, predatory pricing involves a trade-off between short term gains and long term detriments for consumers.

Evidence required

174. In order to establish whether pricing is predatory, TRA will need to address the following questions.⁵⁰

Are prices below cost?

175. Assessing whether prices are below costs raises a number of empirical issues. In particular, identifying the appropriate prices and isolating the relevant costs requires careful consideration. Annex 1 looks in some details at the question of the appropriate cost standard and in particular how costs can be measured in the telecommunications sector.
176. In determining whether prices are below cost, case law / precedents in other jurisdictions (such as the EU) distinguishes between two situations:
- assessing potential predatory pricing by a single product firm; and
 - assessing potential predatory pricing by a multi-product firm.
177. In the first situation, European precedent was established in the case *AKZO Chemie BV vs. The Commission* (1993), “The AKZO case”.⁵¹ Following this precedent, potential cases of predatory pricing are assessed against Average Variable Cost (AVC) and Average Total Cost (ATC), where ATC includes the sum of fixed and variable costs. Where a dominant firm is pricing below AVC, prices are assumed to be predatory and it is for the entity under investigation to rebut the presumption of predation.⁵² The intuition behind this is that the firm would be

⁵⁰ For a more comprehensive treatment, see e.g. Motta, 2004, *Competition Policy: Theory and Practice*, Cambridge University Press, New York.

⁵¹ Case C62/86 *AKZO Chemie BV v. Commission*, [1993] 5 CMLR 215.

⁵² The EC, in its Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009, para 64) states:

better off not selling the product than selling it at this price as the firm incurs a loss on each unit sold. Where a firm is pricing above AVC but below ATC, predation is only found if there is also an intention on behalf of the entity under investigation to eliminate or significantly weaken competition.

178. In the case of a multi-product firm and following the precedent established in the Deutsche Post case, the concept of long run incremental cost ("LRIC") is considered to be more relevant in assessments of predatory pricing than AVC / ATC.⁵³ This is because in multi-product firms (and particularly in network industries such as post and telecommunications) there are likely to be significant fixed and common costs (i.e., costs which cannot be attributed to any one particular product). LRIC is equivalent to avoidable cost, and measures the costs that an entity would save if it did not produce a given product or service. As such, estimates of LRIC exclude joint and common costs.
179. Normally, if a price is below avoidable or long-run incremental cost (LRIC) it is unlikely that the firm will be breaking-even on those products or services. This therefore provides evidence that the entity may be engaging in predatory pricing.⁵⁴
180. There can, however, be some legitimate reasons for price being temporarily below LRIC, which will need to be considered on a case-by-case basis. For example unanticipated demand or supply shocks can lead to a short-term downward movement in prices. In addition, the existence of significant network effects (which are relevant in many telecommunications markets) can encourage an operator with a major network to price below LRIC on some part of its service – a typical example being mobile handset subsidies. This can encourage participation in the network which will be beneficial to all other consumers. Finally, if a new product is introduced, it may initially be priced below LRIC in order to build up demand so that the scale of production can be expanded and economies of scale can then be achieved.
181. Similar to the case set out above for a single product firm, if price is above LRIC but still below a fully allocated measure of costs (i.e. after allocating all joint and common costs across products or services) then the assessment based on a price-cost test, becomes less well defined (see Annex 1 for more details on

"The Commission will take AAC [Average Avoidable Cost] as the appropriate starting point for assessing whether the dominant undertaking incurred or is incurring avoidable losses. If a dominant undertaking charges a price below AAC for all or part of its output, it is not recovering the costs that could have been avoided by not producing that output: it is incurring a loss that could have been avoided. Pricing below AAC will thus in most cases be viewed by the Commission as a clear indication of sacrifice."

Note here, the use of average avoidable cost (AAC) is synonymous with average variable cost.

⁵³ Case COMP/35.141 - Deutsche Post AG, OJ L 125, 5 May 2001, (the "Deutsche Post case").

⁵⁴ In some jurisdictions consideration is given to an additional question, which is "is the predatory firm able to recoup the losses incurred as a result of predatory pricing?". Both the EC and the OFT guidelines suggest that "the recoupment test" may be unnecessary to prove predation. The EC Discussion paper on the application of Article 82 of the Treaty to exclusionary abuses (DG Competition, December 2005, para 122) says:

"As dominance is already established, this normally means that entry barriers are sufficiently high to presume the possibility to recoup. The Commission does not therefore consider it is necessary to provide further separate proof of recoupment in order to find an abuse".

See also Case C-333/94 P Tetra Pak International SA v Commission [1996] ECR I-5951 and COMP/38.233 Wanadoo Interactive Commission decision of 16 July 2003.

various measures of costs). TRA will then investigate the incumbent's intentions in order to come to a view on whether its pricing was unlawful.

Is/Was the firm's intention to eliminate a competitor?

182. Following established precedents in other jurisdictions (such as that outlined above), TRA will, in the case that the entity concerned is pricing above LRIC but below a measure of cost which include a contribution for joint and common cost, also consider whether this pricing strategy forms part of a plan to eliminate or weaken competition in the market. If this intention is identified, TRA will consider the pricing strategy to be predatory. Where the entity is pricing below LRIC and unless rebutted by the entity concerned, TRA will also infer predatory intention from conduct.
183. Documents describing such a predatory strategy would be one potential source of evidence that the entity was intending to eliminate or weaken competition. If there is evidence to suggest that the firm's pricing behaviour would be likely to achieve a predatory objective (for example, exit of a rival or an indication of significant weakening of one or more rivals after this strategy was implemented), then this may also be sufficient to establish a firm's intention to eliminate a competitor. To decide whether a competitor or potential competitor could be excluded from the market, consideration would also need to be given to the characteristics of the competitor or potential competitors and their ability to withstand such a price fall.

Summary

184. To summarise, in order to check for predatory pricing, TRA would need to assess whether prices were below costs. This could be done in two stages, firstly by checking whether price was below LRIC. If it is then the company engaging in such behaviour would need to provide a justification to rebut a presumption of predatory pricing. If the price was above a LRIC-based cost measure but below a measure of cost which included a contribution for joint and common costs, then further evidence would be required on the intended and/or actual impact of such pricing on rivals before a conclusion could be reached.
185. The case study below relates to a French broadband provider who in 2003 was found to have employed a predatory pricing strategy. In this case, because Wanadoo Interactive was considered a separate operator from France Telecom (and hence a single product firm) the EC followed the precedent established in AKZO, applying the average variable cost (AVC) and average total cost (ATC) standard.

Case study: Predatory pricing in Wanadoo's (France) Broadband service

In 2003, the EU Commission⁵⁵ concluded that France Telecom's Internet access subsidiary, Wanadoo, had charged predatory prices for consumer broadband internet access services. This case could have been treated by the Commission as one of margin squeeze, however Wanadoo was not fully owned by France Telecom at the time and therefore there was not a clear case of vertical integration. On the other hand the following conditions for predatory pricing were met:

⁵⁵ EC COMP/38.233.

- Wanadoo was found dominant at the retail level;
- Wanadoo was found to have priced below its average variable cost between March and August 2001 and below its average total cost between August 2001 and October 2002; and
- documents which provided evidence of anti-competitive intent were found. On this specific point the Commission stated that:

“The Decision therefore finds fault with the company not so much for setting prices at the end of 2000 at a below-cost level as for subsequently maintaining those prices at that level as part of a wide ranging strategy of market pre-emption deployed at national level as from the beginning of March 2001.”(Paragraph 331).

In April 2009, the European Court of Justice upheld the Court of First Instance’s finding that proof of recoupment was not required to justify the conclusion that Wanadoo’s pricing behaviour had been predatory.⁵⁶

5.3 Margin squeeze

Description of behaviour and possible effects

186. A vertical margin squeeze occurs when a vertically integrated firm with market power in the provision of an input essential to the production of a downstream service sets the prices of the upstream product and the retail product such that the margin between them is “squeezed”. This means that a competitor in the provision of the downstream service that relies upon the upstream product of the other firm is unable to earn a normal profit and therefore may have to exit the market. In other words, competitors cannot profitably replicate the retail offers of the vertically integrated firm.
187. Such a margin squeeze can have adverse effects on competition. It can weaken, deter or limit downstream competition as the acquisition and servicing of existing customers is loss making for the downstream competitor. Ultimately, a margin squeeze may be detrimental to consumers as it may allow the vertically integrated firm to establish a dominant position in the downstream market and hence to insulate itself from competitive pressures. Future competition can also be deterred via reputational effects. Margin squeeze may also adversely impact competition at the upstream level by undermining the business case of potential vertically integrated entrants which may wish to build a customer base at the retail level up to a critical level before investing in their own upstream infrastructure.
188. This form of vertical leveraging of market power can be achieved in two ways (or through a combination of these two ways):

Increasing the wholesale price relative to the retail price

The vertically integrated operator increases the price at which it sells the wholesale input above cost, while pricing the retail product at the competitive level. This puts downstream competitors at a competitive disadvantage as the margin they can earn is lower than the margin available to the vertically integrated

⁵⁶ At the time of writing, the full decision had not yet been published, but see here for a summary: http://www.dechert.com/library/Antitrust_38_04-09_Predatory_Pricing_EU.pdf.

firm. This would result in a margin squeeze if the margin is not sufficient to recover downstream costs.

Reducing the retail price relative to the wholesale price

The vertically integrated operator prices the wholesale input at or above cost but reduces the price of the retail output below the competitive level. In order to be able to compete, the competitors at the downstream level will have to match the vertically integrated operator’s retail price and will not be able to recover their downstream costs. If wholesale pricing is cost-reflective, this resembles predatory pricing, and in the longer term the vertically integrated operator will have to put its price up again to recoup any losses.⁵⁷

189. Figure 2 below provides a simple representation of price squeeze.

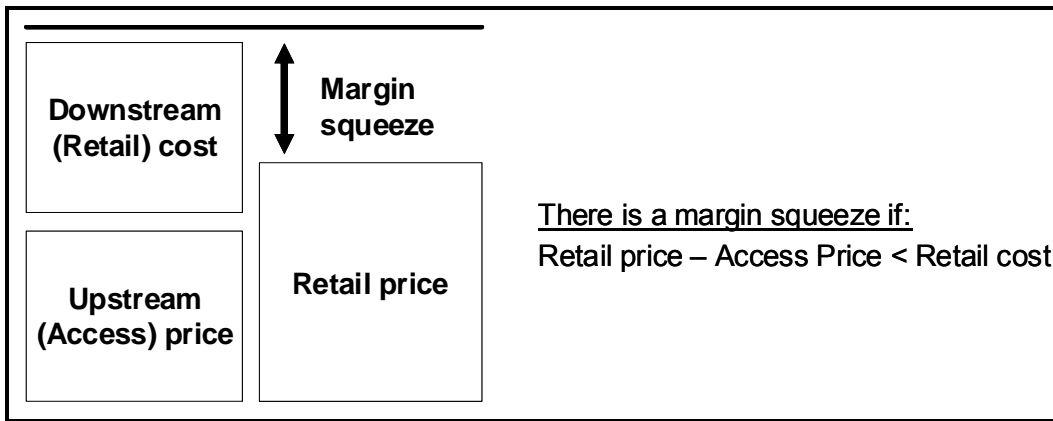


Figure 2: Margin squeeze diagram

190. There are two important pre-conditions for a price squeeze to be feasible (although these are not sufficient).⁵⁸

- Vertical integration – Market Power: the vertically integrated firm must enjoy substantial market power in the upstream market and also operate in the downstream market as otherwise it will not be able to leverage market power upstream in the downstream market to affect the margin squeeze; and
- Upstream bottleneck: the upstream product must be an input essential to compete downstream. The vertically integrated firm will otherwise not be able to affect the squeeze as competitors could switch to alternative upstream products.

Evidence required

191. Imputation testing is typically used to analyse whether there is a margin squeeze. The purpose of a margin squeeze test is to assess whether the margin between

⁵⁷ This is an example of a “raising rival cost” strategy. A price squeeze achieved through an increase of the wholesale price constitutes implicit price discrimination.

⁵⁸ See also Crocioni and Veljanovski, 2003, Price Squeezes, Foreclosure and Competition Law: Principles and Guidelines, *Journal of Network Industries*, vol. 4:1, pp. 28-60 and Oftel, 2003, *Investigation by the Director General of Telecommunications into alleged anticompetitive practices by British Telecommunications plc in relation to BT Openworld’s consumer broadband product*, 20 November.

the price of the upstream service and the retail market price would allow an equally efficient competitor to recover its downstream costs, and to make a reasonable profit over a reasonable period of time.

192. Setting up such a margin squeeze test raises many interrelated empirical issues on which a position needs to be developed. The main empirical issues involved in analysing margin squeeze include:
- the choice of test (i.e. whether the margin is calculated using the downstream cost data of the incumbent or the rival);
 - the choice of cost standard;
 - the scope of the test (i.e. the set of relevant products to be included in the analysis);
 - the relevant wholesale product(s);
 - life cycle of products;
 - calculation methodology; and
 - profitability indicator to be considered.
193. This is a list of some of the most common issues encountered based on experience and cases from other jurisdictions. This list should not be considered exhaustive and depending on the case, TRA will consider any other issues which arise. Each item of the list is discussed below.

Type of test

194. There are, in principle, two ways of calculating the downstream margin, in order to determine if it is reasonable:
- Using the incumbent's downstream costs; and/or
 - Using the competitors' downstream costs.
195. In its Access notice applicable to the telecommunications sector, the European Commission set out two imputation tests based on these alternative approaches⁵⁹
- Test 1: "the dominant company's own downstream operations could not trade profitably on the basis of the upstream price charged to its competitors by the upstream operating arm of the dominant company", or
 - Test 2: "the margin between the price charged to competitors on the downstream market [...] for access and the price which the network operator charges in the downstream market is insufficient to allow a reasonably efficient service provider in the downstream market to obtain a normal profit [...]"
196. The downstream costs of the integrated firm may differ from those of its rivals for a variety of reasons, including superior efficiency, economies of scale and scope, and the technologies used. In order to promote efficient entry at the downstream level, it could be argued that the lowest downstream costs should be used to calculate the margin, regardless of whether they are the incumbent's or its competitor's.

⁵⁹ EC Access Notice, 1998, paras. 117-8.

197. Where economies of scale and scope are significant, competitors may have inherently higher cost structures without necessarily being inefficient. Hence, adjustment for such differences may be warranted to derive the cost of an (hypothetically) equally efficient competitor.
198. This may raise a trade-off between productive and dynamic efficiency.⁶⁰ Productive efficiency is more likely to be achieved through the promotion of efficient entry, and hence through the use of downstream costs measured over the scale of the incumbent. However, it may conflict with dynamic efficiency as smaller competitors, to the extent that they cannot match the downstream costs of the incumbent, may be left out of the market, but may otherwise have a positive impact on dynamic efficiency.
199. TRA is most likely to use both approaches. Practical considerations, such as the availability of data and the ability to adjust existing data, may however constrain what can be done.

Appropriate cost standard

200. Typically, if a price is below the avoidable or long-run incremental cost (“LRIC”) it is unlikely that the firm will be breaking-even on those products or services. Where this exists in relation to downstream costs, it provides evidence that the entity may be engaging in a margin squeeze.
201. In practice, the test can be carried out on the basis of LRIC and LRIC+ (i.e. incremental cost plus a share of joint and common costs or an “equi-proportional mark-up”).⁶¹ In other words, the total cost of supplying the retail output for the downstream competitor (i.e. the price of the wholesale input plus downstream costs) will be measured on either an incremental or fully-allocated basis. There are three potential outcomes of such a test:
- Retail price > Wholesale Price + Downstream Cost (based on LRAIC+)
 - Retail Price ≥ Wholesale Price + Downstream Cost (based on LRAIC) and Retail Price < Wholesale Price + Downstream Cost (based on LRAIC+); or
 - Retail Price < Wholesale Price + Downstream Cost (based on LRAIC)
202. In the first case, it would be reasonable to conclude that the price set by the incumbent would not lead to foreclosure of the downstream market. This is because the retail price is sufficient to recover incremental cost including a contribution towards common costs.
203. In the second case, the price set by the incumbent may or may not result in foreclosure of the downstream market. In this case, further investigation would be required to determine whether the conduct of the vertically integrated firm may have a foreclosing effect.
204. In the third case, it would be reasonable to conclude that there may be a margin squeeze which could lead to foreclosure of the downstream market. This is

⁶⁰ Productive efficiency is achieved when costs are minimised. Dynamic efficiency relates to incentives over time to innovate and invest.

⁶¹ See Annex 1 for more details, and notably the justification for LRIC and LRIC+ based on the presence of significant fixed and common costs in the telecommunications sector.

because the retail price is not sufficient to recover the downstream cost (inclusive of a reasonable profit) incurred.

205. One potential issue that may arise in calculating the margin is how the vertically integrated firm allocates its revenues and its common costs, both across products and between the upstream and downstream parts of the business when calculating cost data for submission to the regulator. To the extent that there are incentives for the incumbent to allocate these costs in such a way as to hide any margin squeezing behaviour, any cost or revenue information submitted to TRA by the vertically integrated company will be thoroughly reviewed.

Level of aggregation of the test

206. There are three main options regarding the level of aggregation at which a margin squeeze test can be performed:

- product level;
- customer class level; or
- market level.

207. In the first case, the margin squeeze test is applied at the product level. Hence, it looks at profitability on a product-by-product basis by considering the prices and costs associated with individual products. A margin squeeze test will be performed at a customer class level if there is concern that only certain segments of the market are affected. At the other extreme, the test can be performed over the whole relevant retail (downstream) market. The appropriate level at which a price squeeze test should be conducted is case specific and therefore TRA will decide which approach to take on a case-by-case basis, having regards to customer behaviour, firms' strategies and business models and switching cost faced by consumers for example.

208. The level at which the test is undertaken will affect the type of cost data required. If a margin squeeze test is conducted at market level, then it is likely that top-down data would be most appropriate – i.e. operator data relating to the specific market. If, however, a more granular approach is taken, then further drilling down will be necessary and some of the data required may have to be estimated using a “bottom-up” approach.

The relevant wholesale product

209. In some markets there may be a number of different wholesale products available which could be used by a downstream rival to enable them to compete with the incumbent in the downstream market. For example, at the time of writing, Batelco offers a range of broadband wholesale products (including wholesale ADSL and bitstream) which a potential competitor could purchase and use in order to provide retail broadband services.
210. When they are different wholesale products along the value chain, TRA will analyse the case and determine which wholesale product or combination of products, should be used. TRA will notably consider the competitive conditions at the different levels of the value chain and the nature of the complaint.

Relevant time horizon

211. Since downstream costs and revenues often vary considerably over the course of a product's life, taking a snap-shot assessment of profitability may not be representative of the business over the medium term, i.e. in a steady state. Consequently the life cycle of the product and the variations in both costs and revenues throughout that life cycle should be taken into account in the assessment of the likely impact of the incumbent's tariffs on market entry. This may require a longer term assessment of profitability or adjustments to certain costs such that they better reflect an economic rather than an accounting view of cost measurement. For example, costs such as marketing and customer acquisition costs may need to be considered as intangible investments which are then amortised over time. See the latter part of Annex 1 for more details on this issue.
212. A different but related issue is whether margins are analysed on a forward- or backward-looking basis. In performing a forward-looking analysis, TRA would investigate whether the prices of a new product are likely to represent a margin-squeeze now or in the immediate future. When performing a backward-looking analysis, TRA would investigate whether a company had engaged in a margin-squeeze in the past. Depending of the facts of the case, TRA may also combine both approaches to assess whether a price squeeze has occurred and may be expected to continue.

Profitability indicator

213. The purpose of a margin-squeeze test is to assess whether downstream competitors can compete given the wholesale price that they face. This requires selecting an indicator of profitability and the estimation of what level of profit may be 'reasonable'.
214. The potential profitability indicators which could be considered are:
- the return on capital employed ("ROCE"); or
 - the return on turnover ("ROT").⁶²
215. The level of the downstream margin which would be considered "reasonable" in a competitive market (or "normal profits") depends on the risk profile of the retail activity and the product investigated.
- If the ROCE is used to measure profits then the benchmark would be the weighted average cost of capital (or "WACC").
 - If the ROT is used to measure profits then the benchmark would be an average ROT across a sample of other firms facing similar risks.
216. There are problems with applying both of these profitability indicators in a margin squeeze test. In relation to calculating the ROCE and comparing it to the WACC, the following issues arise:
- Retail activities are generally not very capital intensive such that the ROCE derived may not give an accurate picture of the actual rate of return.

⁶² See Annex 1 for more details on these measures of profitability.

- Reliable data on the mean capital employed at the retail level generally does not exist and as it is likely to consist essentially of working capital, it will tend to vary significantly over time.
217. An alternative profit measure, the ROT may be more suitable given the limited capital intensity of retail activities. It has its own weaknesses, however, including the need to establish an appropriate benchmark.⁶³ For example, if the return is compared to an average return calculated across a sample of other firms it can be difficult to select an appropriate sample. The benchmark could be skewed if the firms included in the sample face a different level of risk or do not operate in competitive environments.
218. TRA is minded to consider both indicators of profitability, with a preference for ROCE, where data availability enables its calculation in a robust manner. An analysis of gross margin may suffice when the sum of the wholesale product price and downstream cost (exclusive of a return on capital employed) is above the retail price. In such cases, there is a prima facie price squeeze.
219. Where appropriate TRA may also consider other factors in its analysis. These include:
- the characteristics of the market (including barriers to entry);
 - the depth and duration of the squeeze; and
 - the (likely) effect of the conduct on existing and potential market participants, including their ability to acquire new customers.
220. The case study below refers to a case from 2002 where a complaint was made by a UK broadband operator regarding the behaviour of the incumbent (BT) in the broadband market. In this instance, the evidence did not suggest that BT had caused a margin squeeze and the complaint was rejected. In this case, Oftel applied test 1 (i.e. it relied on the incumbent's cost data).

Case Study - Oftel/Ofcom investigation of alleged margin squeeze by BT in the broadband market

In March 2002, Freeserve (now France Telecom / Orange) made a complaint to the then UK telecommunications regulator, Oftel, regarding certain pricing policies by British Telecom ("BT") of its consumer broadband activities. Oftel considered the potential abuse set out in Freeserve's allegations to be most appropriately addressed in the context of a margin squeeze.

The regulator conducted a profitability analysis to check if it would have been viable for BT's downstream business to operate at the wholesale prices charged to its rivals. The modelling brought a mixture of positive and negative results depending on the assumptions adopted. On the other hand, BT's declining broadband shares and lack of price leadership pointed to the conclusion that the incumbent's actions did not have any material adverse effect on competition.

⁶³ See in particular the extensive discussion and benchmark analysis performed by the OFT in the BSKyB price squeeze case. See OFT, Decision of the Office of Fair Trading under Section 47 relating to decision CA98/20/2002: alleged infringement of the Chapter II prohibition, 29 July 2003.

The inquiry concluded that the margin between BT's wholesale price and residential retail prices was sufficient to allow a reasonably efficient operator to compete, by reference to BT's own cost. As a result, Ofel decided that BT had not infringed the Competition Act (1998).⁶⁴

5.4 Bundling or tying

Description of behaviour and possible effects

221. Bundling refers to the selling of two or more products or services together as a package. The price of a bundle of services is typically expected to be lower than the stand alone prices of its components, since otherwise there would be limited incentives for consumers to buy the package. This is why bundling is also often referred to as multi-product rebate or discount. Bundling can be achieved either via contractual means, in which case a supplier contractually binds a customer to buying two (or more) products together, or as a result of technical restrictions. This means that a product or service may have been designed such that it is technically only compatible with one other associated product or service.
222. Tying, on the other hand, refers to a special type of bundle where the selling of one or more products or services (i.e. the tying product) is conditional upon the purchase of one or more products or services (i.e. the tied product) but this does not hold in the other direction. The tying product is sold only if the tied product is purchased.
223. Bundling or tying are common practices which can be pro-competitive and provide benefits to consumers. The potential benefits of bundling / tying include:
- Economies of scope – bundling may reduce some of the costs associated with providing the products or services at the retail level. Examples include marketing, joint billing, and customer service, all of which may be less costly than if the products or services were supplied separately. Consequently, the price charged to the consumer may be reduced.
 - Reduction in transaction costs – as the consumer will no longer need to purchase the products separately, the associated transaction costs will be lower and there could therefore be an improvement in convenience for the consumer. Consequently, the overall cost of the products to the consumer may be reduced.
 - Improved product valuation and demand expansion – the availability of the bundle may improve consumers' valuation of the products. This could increase the number of consumers prepared to buy the products, relative to the number that would buy them separately and hence increase take up of the products and improve consumer welfare.
224. Because bundling or tying are not necessarily anti-competitive practices, the details of each case need to be carefully considered to decide whether it

⁶⁴ Note that this decision applies to BT pricing in the period from March to May 2002. Following later appeals by Freeserve to the Competition Appeal Tribunal, Ofel (later Ofcom) agreed to reopen investigation into BT pricing behaviour from June 2002 onwards. The inquiry is still ongoing.

adversely impacts competition and harm consumers. A rule of reason approach is appropriate.

225. There are two forms of bundling, pure and mixed. “Pure” bundles are those where the products can only be purchased in the form of a bundle.⁶⁵ “Mixed” bundles are those where the products are available both as a bundle and on a stand-alone basis. A tie falls somewhere between the two, as the “tying” product is only available in the form of the tie, while the “tied” product is also available separately.
226. A pure bundling strategy or a tying strategy raises anti-competitive concerns if a dominant firm ties the supply of a product or service in which it is dominant, to the supply of a product or service which it supplies competitively. This is described as “horizontal leveraging” of market power from one market into another. It may limit the possible sales of the competitive products by competitors and lead to market foreclosure. There are two potential scenarios.
- Scenario 1a: The dominant firm is the only supplier of one of the products and therefore the market may be foreclosed by the bundling of the two products, as no other supplier is able to produce the bundle (tie), i.e. it is not replicable. In addition, consumer choice is constrained.
 - Scenario 1b: The dominant firm is not the only supplier of one of the products but prices the bundle / tie below the combined cost of the products or services included in the bundle / tie. Although potential competitors could supply the same bundle, the “predatory pricing” behaviour of the dominant firm could prevent them from being able to compete.
227. A mixed bundling strategy raises anti-competitive concerns if, as above, a dominant firm is leveraging its market power from one market to another.⁶⁶ Two scenarios are feasible:
- Scenario 2a: If the bundle is not replicable (as above) then there is a risk that the pricing of the bundle is such that suppliers of separate products cannot compete.
 - Scenario 2b: If the bundle can be replicated by other suppliers, but the dominant firm prices it below the combined cost of the bundled products then this could be considered predatory behaviour.
228. Anti-competitive concerns with bundles relates to horizontal leveraging of market power and lack of replicability, which may result in the foreclosure of horizontal markets. That is, bundling of products or services, through the horizontal leveraging of market power, may result in the exclusion of (equally efficient) rivals involved in the production of the competitive product(s). As a result the competitive market may be foreclosed to competitors and consumer choice restricted. Bundling or tying may also reinforce dominance and restrict competition in the provision of the other product(s).

⁶⁵ See, for example Motta (2004), *Competition Policy: Theory and Practice*, Cambridge University Press, New York; and Nalebuff (2003) *Bundling, Tying, and Portfolio Effects*, DTI Economics Paper, No 1, February.

⁶⁶ There might be further, non-price competitive constraints. For example, consumers might place additional value on buying the two or more products jointly, which in practice, could mean that consumers are unlikely to buy the stand alone products. This could mean that the mixed bundle is a de facto pure bundle.

Evidence required

229. In order to assess whether bundling or tying are anti-competitive, TRA will consider the available evidence. The following figure illustrates how TRA proposes to consider whether a particular bundle may raise anti-competitive concerns. The chart below provides only a guide and TRA will consider each specific case on its merits.

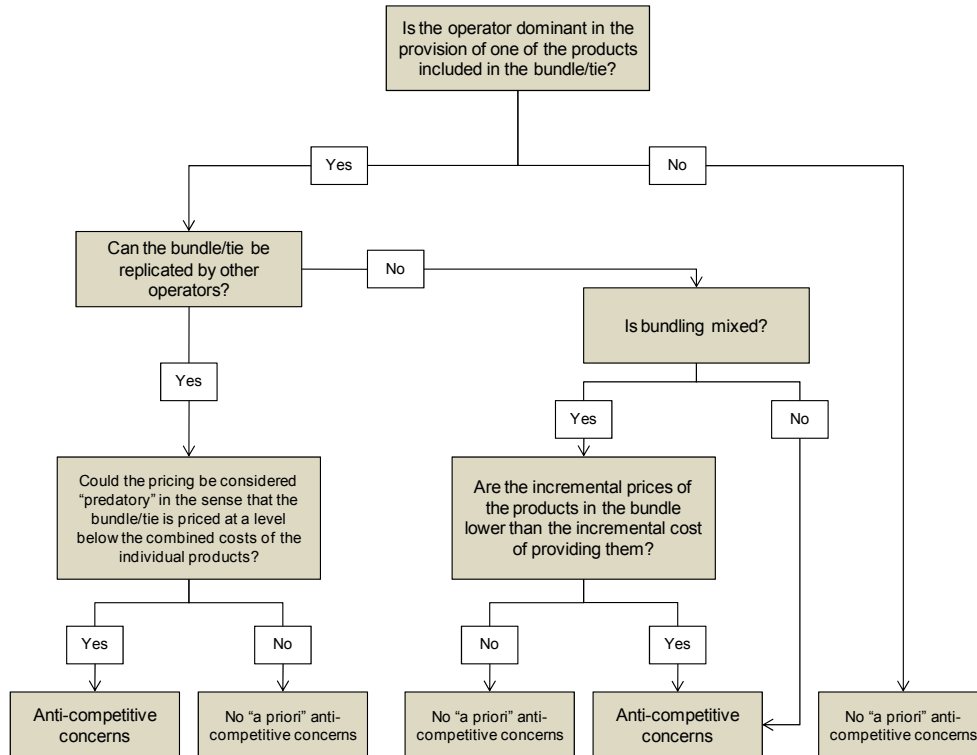


Figure 3: Proposed framework for assessing anti-competitive bundling / tying

230. In order to address these questions, TRA will need to:

- Assess whether any operator selling the bundle is dominant in the market for the provision of one more products of the bundle/tie.
- Obtain information about the products or services to understand whether the bundle/tie could feasibly be replicated. This could include showing that either other operators currently offer the same bundle or it would be possible for another operator to provide that bundle with limited additional costs. For example, to be able to provide that part of the bundle in which the operator is dominant it may be necessary for a competitor to purchase a wholesale product or service offered by a dominant operator or another operator. In assessing replicability, TRA will also consider the barriers to entry or expansion for the products included in the bundle.
- Consider consumer behaviour and preferences to understand the degree to which slightly different products, which fall within the same market, could be used to replicate the bundle. Even if a bundle cannot be directly replicated, it

may be possible to produce an equivalent bundle, using products which are considered close substitutes from a consumer's perspective.

- Collect cost and price data from all parties involved in order to assess whether or not the pricing of the bundle (and where relevant the individual products) is anti-competitive. (The same issues arise in relation to measuring costs as when assessing predatory pricing and margin squeeze - see Annex 1 for more details on this).
- Consider the current and likely uptake of the bundle in order to evaluate whether the bundle may have a material impact on competition by foreclosing a market, harm consumers and restrict choice.

Price tests

231. The price tests referred to in the flow chart above are described in more detail below.⁶⁷

- Is the price of the bundle predatory? The objective is to determine whether the price of the bundle is lower than the combined costs of the products or services within the bundle along the lines described in 5.2 above.
- Is the price of the bundle anti-competitive relative to the prices of the stand-alone products? The objective is to determine whether the "incremental price" of each product or service is lower than the cost of producing that product or service. The "incremental price" is calculated as the difference between the price of the bundle and the stand-alone price(s) of the other product(s) included in the bundle.

232. The case study below relates to a UK case from 2004, where the bundling of fixed line rental and calls by the incumbent operator BT was found not to have been anti-competitive.

Case study – Testing for Anti-Competitive Bundling

In March 2004, BT announced changes to its "BT Together" payment plans. In particular, the fixed line rental fees within the package increased while call prices were reduced.

Following BT's price changes Ofcom received complaints from a number of Carrier Pre-Selection (CPS) providers stating that BT's revised tariffs may be anti-competitive. In particular, it was alleged that, amongst others:

- the effect of the new "BT Together" pricing plans would represent a margin squeeze between charges CPS providers were required to pay to BT and retail prices charged by the incumbent; and
- BT's revised retail prices effectively bundled the provision of line rental with call prices and that the bundle was claimed to be anti-competitive. CPS providers

⁶⁷ These are consistent with guidance from the EC on abusive exclusionary conduct and the US Department of Justice "discount-allocation safe harbor". See EC, 2008, Guidance on the Commission's Enforcement Priorities in Applying Article 82 EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings, p19 notably, and US Department of Justice, 2008, Competition and Monopoly: Single-Firm Conduct Under Section 2 of the Sherman Act. The Report by the US Department of Justice has been withdrawn on 11 May 2009.

accused BT of “cross-subsidizing” call discounts by increasing its revenues from line rental.

Ofcom rejected the first accusation on the basis of standard margin squeeze tests.⁶⁸ With respect to the second accusation, the regulator concluded that the “BT Together” package may, in effect, represent bundling. However, the report stated that bundling of line rental and call prices was not prohibited per se and that only bundling offers that may distort competition constitute an abuse of dominance. In particular, Ofcom’s decision stated that:

“The bundling of services by a dominant undertaking may be of concern where the undertaking’s conduct is seeking to exploit its position of dominance in the provision of one service by requiring a second, more competitive service to be bundled with the first, and where a customer has an incentive to purchase the second more competitive service from the dominant provider as well as the first.” (Paragraph 131); and

“Such potential foreclosure effects might arise where the secondary product were supplied below cost such that even equally efficient competitors in the secondary market were unable to compete.” (Paragraph 132)

Since Ofcom’s analysis of potential margin squeeze demonstrated that BT had not reduced call prices below cost it concluded that the “BT Together” offer did not constitute anti-competitive bundling.

5.5 Price and non-price discrimination

Description of behaviour and possible effects

233. Discriminatory anti-competitive behaviour can take the form of price or non-price discrimination. Whilst some forms of discrimination can be welfare enhancing, undue discrimination can increase barriers to entry and expansion in markets and so enable a dominant firm to either maintain its dominant position or to leverage its dominant position from one market to another competitive market. Ultimately this could lead to consumer detriment by making switching between firms more difficult, increasing barriers to entry and increasing a firm’s dominance in a market. Price and non-price discrimination are each described further below.

Price discrimination

234. Price discrimination occurs when a firm undertakes an equivalent transaction with different customers but charges them different prices when there is no underlying cost differential.⁶⁹ For example, the prices charged for an equivalent product or service differs, but the underlying costs of provision are the same.⁷⁰ This behaviour is only sustainable if the firm is able to segment the market and maintain segmentation between different customer groups. This would prevent the separate groups of consumers from trading with each other.

⁶⁸ Ofcom (2004), “Investigation against BT about potential anti-competitive exclusionary behaviour” Decision of the Office of Communications, Case: CW/00760/03/04, 12 July 2004.

⁶⁹ OFT, “Assessment of conduct, draft competition law guideline for discussion” (Section 3.1), April 2004.

⁷⁰ Alternatively, the prices charged are the same but the underlying costs are different.

235. In economic theory, three forms of price discrimination are often described, so called first, second and third degree price discrimination. First degree price discrimination (also called perfect price discrimination) refers to the case where an entity is able to charge each consumer a price equal to his willingness to pay, thus extracting all the consumer surplus. In reality, this form of price discrimination is unlikely to occur, due to the difficulty of perfectly segmenting customers.
236. In second degree price discrimination, the entity is not able to identify the willingness to pay of individual consumers or groups of consumers. Rather, the entity designs different pricing schemes into which consumers “self-select” according to their demand for the product or service. For example, in telecommunications this could take the form of offering volume discounts or different tariff bundles aimed at low, medium and high volume users, into which consumers will self select.
237. In contrast to second degree, under third degree price discrimination, the entity is able to identify and separate different customer groups (e.g. students vs. professional) and hence offer different tariffs to each group. In telecommunications, a common example of this is the use of distinct tariffs for business and residential users. In the presence of fixed costs both these forms of price discrimination can be welfare enhancing, enabling the entity to recover relatively more fixed and/or common costs from those consumers who value the service more highly and hence have a higher willingness to pay. By doing so, the company may be in a position to reduce the prices to those customers that have more price sensitive demands, thereby leading potentially to a higher level of overall demand, and consumer welfare.
238. Broadly, in the telecommunications sector, price discrimination could occur at two points in the value chain and could therefore result in the following:
- The (wholesale) price a dominant vertically integrated firm charges to its own downstream business differing from the price it charges to other downstream competitors;
 - Different retail prices being charged by operators in a dominant position to different customers or customer groups. Examples here could include differentiating between business and residential customers, offering volume discounts (where they are not justified by cost differentials) and offering specific tariffs to individual corporate clients. One specific example which is discussed in greater detail in section 0 is potential price differentials between on-net and off-net tariffs for mobile usage.
239. In the first case (i.e., price discrimination in wholesale markets), the dominant integrated operator could cause the retail market to become foreclosed. By offering the wholesale input to its own retail business at a preferential rate it would effectively be leveraging its dominance in the upstream market into the downstream market. This could be interpreted and assessed as a price squeeze.
240. In retail markets, some forms of price discrimination may be introduced to reduce switching between operators, by raising switching costs (e.g., through volume discounts, specific corporate packages). Price discrimination by dominant firms which has this effect could have a material impact on (potential) competition in a relevant market.
241. At the retail level, price discrimination may not, however, necessarily be anti-competitive. In an industry such as telecommunications, where fixed and

common costs are significant, if the nature of demand of different consumers or groups of consumers differs significantly, price discrimination may be welfare enhancing. As set out above, price discrimination allows firms to price products to different customers based on their willingness to pay and may thereby lead to a more efficient way of recovering common and fixed costs. If the relative willingness to pay of a consumer group is very different, then price discrimination could lead to an improvement in consumer welfare.⁷¹ However, price discrimination by dominant firms in industries with fixed and common costs could be considered an abuse, as the welfare impact of such behaviour is ambiguous and so must be considered on a case-by-case basis.

Non-price discrimination

242. Non-price discrimination occurs when the firm offers different terms and conditions to different users, where these cannot be justified from a cost or economic stand point. For example, non-price discrimination would arise if an operator offered different levels of reliability (a transaction condition) to two customers in similar circumstances for the same product, at the same price. Whilst this form of discrimination is also possible at the retail level, it is probably more common and also potentially more problematic at the wholesale network level. Specifically, where a dominant vertically integrated firm offers preferential non-price terms and conditions to its own downstream business relative to other downstream competitors this is termed “quasi-refusal to supply”.⁷² This is discussed in more detail in Section 5.7 below on “refusal to supply”.
243. Like price discrimination, non-price discrimination can harm competition if, in the wholesale case, it results in vertical foreclosure, or if it leads to a reduction in competition at the retail level, for example. Non-price discrimination at the wholesale level may be particularly difficult to prove.

Evidence required

244. There are different types of evidence that may be considered by TRA to assess whether a particular behaviour may be anti-competitive.
245. In all cases, TRA will require certain details about the discriminatory behaviour in order to determine how to progress. This includes whether the discrimination relates to price or non-price factors; whether it occurs at a wholesale or retail level; and the degree of discrimination, i.e. whether different prices or non-price factors are offered to every consumer or to different groups of consumers. In addition, it will be important to establish the equivalence of the transactions between which discrimination is occurring.

⁷¹ See, e.g. OFT, *The Chapter II Prohibition, The Competition Act 1998*, March 2000, paragraph 3.8); and OFTEL, 2000, *The Application of the Competition Act in the Telecommunication Sector*, January 2000.

⁷² See TRA, A Position Paper issued by the Telecommunications Regulatory Authority concerning price and non-price discrimination, 10 September 2007 for more details on TRA's position on discrimination between a vertically integrated firm's downstream retail business and competitor downstream businesses.

Price or non-price discrimination in wholesale markets⁷³

246. TRA will likely make an “a priori” assumption that discrimination in wholesale markets by a dominant operator is harmful to competition by enabling an operator to leverage dominance between markets. This is due to the significant benefits of this behaviour to an integrated operator, the lack of any benefits that are likely to accrue to consumers, and the potential harm to the external customer’s ability to compete in a downstream market. In the event of an alleged breach of Article 57 and/or 65 in this manner, the operator subject to the complaint will be required to provide objective justification for the differential treatment in order to rebut this presumption. TRA will therefore consider whether the customers’ circumstances can explain the differences in treatment. This will entail primarily considering whether the customers differing circumstances affect the costs of supply and hence the terms offered.

Price or non-price discrimination in retail markets

247. Here, the potential welfare enhancing effects of discrimination may be more significant. Therefore, TRA does not consider it appropriate to consider a priori all retail price discrimination to be anti-competitive. Rather, TRA proposes a case-by-case approach in order to identify undue discrimination (e.g., where the discriminatory behaviour cannot be justified on reasonable technical, economic, commercial grounds).
248. In assessing whether a particular discriminatory practice at the retail level is anti-competitive, TRA will typically consider whether the customers’ circumstances can explain the differences in treatment (as above). In most cases this will entail considering whether the customers differing circumstances affect the costs of supply and hence the terms offered.
249. TRA will then consider whether any differences in price or non-price factors which cannot be justified on the grounds of differences in underlying customer circumstances, are likely to harm competition and consumers. This would normally involve considering whether the demand characteristics of the customers differ. While the demand characteristics of the consumers may be difficult to directly determine, TRA may consider whether demand is higher as a result of the discriminatory behaviour than it would have been if terms were consistent across consumers. In addition, it will be important to understand whether the offer made is replicable by other operators in the market. This will provide evidence on whether the discrimination has a negative impact on consumers’ ability to switch and hence whether competition is affected.

⁷³ Provisions under Section 57 of the Telecommunications Law and the ex-ante regulation of interconnection and access products can, to an extent, prevent discrimination from occurring at the wholesale level. TRA acknowledges that non-price discrimination cannot always be prevented solely through ex-ante regulation. To the extent that discriminatory behaviour may have a material impact on competition in the market, TRA would consider it as a potential breach of Section 65 of the Telecommunications Law.

5.6 On-net /off-net price discrimination

Description of behaviour and possible effects

250. On-net / off-net price differentiation refers to the practice of charging different prices for on-net (i.e. within the same network) and off-net (i.e. between different networks) calls, with on-net calls being cheaper than off-net calls. There are other variants of on-net / off-net price differentiation, such as plans that include buckets of free on-net minutes or closed user group pricing where a consumer is able to make cheaper calls to a selected group of consumers that belong to the same network.
251. On-net / off-net price differentiation is common in the mobile sector and to a lesser extent in fixed communications, although the advent of voice over broadband and Internet boxes in certain countries and of infrastructure-based competition have led to an increase in the use of on-net / off-net price differentiation.
252. This pricing strategy gives rise to so-called 'restricted club effect' whereby only the customers of a particular operator benefit from lower rates.⁷⁴
253. Differences between on-net and off-net prices can be (and have been) observed in markets that are considered to be competitive, and are therefore not problematic per se. For example, competition for customers that tend to call each other relatively more (e.g. businesses or families) can lead to relatively lower prices for on-net calls, to attract such customers to an operators' network.
254. Potential anti-competitive effects of on-net / off-net differentiation include customers lock-in and heightened barriers to expansion and entry. By generating strong club effects, deep on-net / off-net discounting may artificially increase the attractiveness of the larger network(s). Significant on-net / off-net price differentiation can lead to a smaller network, which is typically the new entrant network, appearing less attractive than larger networks and may suffer from an image deficit of "expensive network" by virtue of its smaller size.
255. The mechanism by which this pricing strategy may affect competition dynamics is as follows. Suppose there are two networks, a large and a small one, competing for customers. The large network introduces a deep on-net / off-net price differential (or equivalently a closed user group plan). Even if the smaller network introduces a similar scheme, customers may still prefer to join/stay with the large network as they would expect that it would cost them less to reach more people. To remain attractive, the smaller network may need to offer lower off-net prices, in order to reverse the perception of it being a more expensive network and this could impede its ability to compete.
256. An additional concern identified is created if customers put significant value to the calls they receive. In these circumstances, a larger network, by increasing the price of off-net calls can reduce the value to customers of joining a smaller network, and the smaller network would find it more difficult to respond.

⁷⁴ Restricted club effects or tariff mediated network externalities differ from network externalities in so far as the latter generate benefit to all customers, regardless of the network they belong to. See Laffont and Tirole (2001), *Competition in Telecommunications*, Cambridge: MIT Press, p 201.

Evidence required

257. In assessing whether on-net / off-net pricing differentials constitute anti-competitive conduct, TRA will naturally have regard to the other criteria for finding an operator to be in breach of Article 65 of the Telecommunications Law (i.e., that operator is dominant in the relevant market and the conduct has or is likely to have a material impact on competition).
258. Further, to evaluate whether the pricing strategy of the operator concerned is anti-competitive, TRA will take into account the difference between the termination rate of other operators and the cost of terminating calls on-net. A differential between off-net and on-net call rates that is significantly greater than the differential between the termination rate and the cost of terminating calls on-net could be indicative of a potential abuse of a dominant position, as the price differences would not be justified purely on the basis of costs. This test has been used by other competition authorities, such as the French Competition Council (see box below), and advocated by economists.⁷⁵
259. TRA will also evaluate other reasons for on-net / off-net differentials to exist, and in particular the existence of competition for closed user groups and the value that subscribers attach to receiving calls, where such evidence is available.
260. TRA may also consider, if the circumstances of the case and the data available warrant it, whether the retail offers of the party concerned can be replicated. In conducting its analyses, TRA will take into account the complexities of retail packages as one-to-one comparison of single element of packages can be misleading. In some cases a specific on-net charge being below that operator's termination charge is not necessarily evidence of anti-competitive conduct. The retail and wholesale revenues earned by an operator from particular customers will also be considered.
261. Additional evidence that will be examined by TRA will include the timing of introduction or sharpening of any pre-existing on-net off-net price differentials, the reaction of competitors to such differentials, and the trends in such differentials over time. Evidence from other countries with similar characteristics may also be considered.

Case Study – Conseil de la Concurrence Decision on on-net off-net discounting by Orange Caraïbe⁷⁶

In July 2004, Bouygues Telecom brought a case against Orange Caraïbe before the French Competition Authority for an abuse of dominant position in three small French overseas departments in the Caribbean.

A central element of this case was the deep on-net / off-net discounting operated Orange Caraïbe, the market leader with over 80% market share. In relative terms the

⁷⁵ See for example, Valletti (2007) Economic theory of intercarrier compensation: two-sided markets, WIK Seminar.

⁷⁶ Conseil de la Concurrence, Décision n° 04-MC-02 du 9 décembre 2004 relative à une demande de mesures conservatoires présentées par la société Bouygues Télécom Caraïbe à l'encontre de pratiques mises en oeuvre par les sociétés Orange Caraïbe et France Télécom.

discount observed represented up to 80% for certain retail packages.

After a five-month investigation, the Conseil de la Concurrence issued an injunction requiring Orange Caraïbe to ensure that, for each offer, the difference between off-net and on-net rates to be no greater than the difference between the costs incurred by Orange Caraïbe to terminate these two types of communications.

The Conseil de la Concurrence concluded that Orange Caraïbe conduct amounted to an abuse of dominant position as the level of the price differential was not justified by cost differences. It argued that it prevented entry and dissuaded customers from joining Bouygues Telecom through the restricted club effect generated by the off-net / on-net price discrimination.

Those preliminary findings were confirmed by the Appeal Court of Paris in 2005.⁷⁷

5.7 Refusal to supply⁷⁸

Description of behaviour and possible effects

262. In some telecommunications markets, potential suppliers need to use the infrastructure of another operator, in order to provide a particular service at the retail level. Where the incumbent both owns the infrastructure (or network) and provides retail services as well, there can be an incentive for them to act in a way that protects their own position in the retail market. This can involve limiting or restricting the ability of potential suppliers to use the network. Unless this behaviour can be objectively justified then it could be considered anti-competitive.
263. If a dominant vertically integrated firm refuses to grant direct access to certain network facilities or infrastructure and potential competitors have no credible alternative to using that network (including it not being economically feasible to duplicate that network), this behaviour could restrict or limit competition at the downstream level. This could create clear consumer detriment, by limiting customer choice in the retail market and enabling the vertically integrated firm to maintain prices above a competitive level.
264. The behaviour may be more subtle, in that access could be allowed, but the terms and conditions of this access may be unreasonable and amount to a “constructive refusal”. This could take the form of setting the price above the competitive level, or reducing the quality of service. Consequently a new entrant could find it difficult to compete profitably. If access is permitted but the incumbent refuses to supply information generated by the network, this could also reduce the ability of other operators to compete with the vertically integrated incumbent. For example, caller identification information may be important in allowing a potential competitor to provide a service comparable to that of the incumbent. Similarly, failure to supply necessary technical information, such as where a new entrant can interconnect to the incumbent’s network, could also be seen as an anti-

⁷⁷ See http://www10.finances.gouv.fr/fonds_documentaire/dgccrf/boccrf/05_06/a0060015.htm.

⁷⁸ Article 57 of the Telecommunications Law provides for the application of wholesale and access obligations on dominant operators on an ex-ante basis. Hence, compliance with those obligations is primarily enforced through Articles 57 and 35 and Regulations. Article 65 may also be used in relation to such anti-competitive behaviour when justified.

competitive practice. Other examples could include forcing competitors to interconnect at all locations or conversely allowing them to interconnect at only one point.

Evidence required

265. TRA will need to compare the behaviour of the incumbent towards different firms at the downstream level. Therefore it will require evidence in relation to the willingness of the incumbent to supply different downstream competitors and the terms on which it was prepared to do so. In order to properly assess a specific refusal to supply and whether it may be anti-competitive, TRA will need to obtain information regarding the negotiations between the parties and any proposed terms and conditions of access. Details of any access agreements already set up with other suppliers will also need to be reviewed.
266. In addition, any justifications for denying access will need to be submitted by the dominant company refusing to supply. Commercial considerations (such as poor creditworthiness of the customer or lack of available capability on the network) will also be taken into account. TRA will also consider the characteristics of the facilities to which access is being refused with a view to assessing whether it is economically feasible to duplicate them and the extent to which it is indispensable for the party seeking access to it.⁷⁹

5.8 Unduly long-term contracts

Description of behaviour and possible effects

267. The intensity of competition in a market critically depends on the number of customers who are likely to respond to any given reduction in price or improvement in the terms of offer. Unduly long term lock-ins, for example in the form of long-term contracts, may harm competition within a market by restricting customers' ability to easily switch between providers. Hence, such behaviour can be seen as a form of strategic behaviour aimed at creating barriers to entry or expansion. That is, other new or potential entrants would struggle to acquire any customers if the existing market players only offer very long-term contracts.
268. The willingness of customers to switch between different providers depends on the costs they have to incur in order to change their service provider and the contractual agreements that tie them to their current supplier. Switching costs may be in the form of financial costs (e.g. penalties relating to early termination of a contract) or non-financial costs (e.g. losing one's phone number).
269. However, requiring customers to sign long-term contracts is not necessarily anti-competitive since such offers allow operators to provide their customers with, for example, free or subsidised handsets and to then recoup that investment over the life of the contract. Furthermore, adjacent regulations such as number portability can facilitate competition by reducing customer switching costs.

⁷⁹ Such facilities may sometimes be referred to as "essential facilities".

Evidence required

270. When assessing whether a particular customer contract may constitute anti-competitive conduct, TRA will firstly assess the uptake of the offer as this would notably give an indication of the materiality of the offer in question and hence whether the offer may have a material impact on competition. Also the level of penetration would be taken into account as the higher the degree of penetration, the more likely long-term contracts would have the effect of “tying up” the market.
271. TRA will also investigate the offer by benchmarking the contract length and terms and conditions with other, comparable contract offerings in the market. It will also assess whether there are alternative, shorter term contracts for similar products or services available and their relative costs to consumers. For example, should minimum contract lengths for telecommunications services all be increased significantly prior to the entry of a new licensed operator into the market, without corresponding changes in other terms and conditions, TRA may consider this as indicative of anti-competitive conduct. Finally, the size of any upfront investment made by the operator would also be relevant in determining whether the behaviour may be justified.

Case study: The introduction of 18 month contracts in the Jersey mobile market⁸⁰

In April 2006, Jersey Telecom (the incumbent provider of fixed and mobile telephony on the island) launched 18 month contracts for its mobile services, offering larger discounts on handsets than were available with 12 month plans. This followed the award of licences to two new entrants to the mobile market, Cable & Wireless and Airtel.

In August 2006, after an investigation by the Jersey Competition and Regulatory Authority (“JRCA”), Jersey Telecom was ordered to stop offering 18 month contracts. This reflected the concern of the JCRA that the introduction of longer contracts would, by reducing the number of available customers for the new entrants, limit the ability of the newly licensed providers to compete in the market, hence potentially foreclosing the market and ultimately creating consumer detriment. As such, the extended contracts were considered by JCRA to be a breach both of Jersey’s Competition Law (which prohibits abusive practices by one or more dominant undertaking) and Jersey Telecom’s licence conditions, which provides that Jersey Telecom should not engage in any practice which is likely to distort, prevent or restrict competition in the provision of telecommunications services.

⁸⁰ See, “JCRA Media Release: 30th August 2006: JCRA requests Jersey Telecom to withdraw 18 month mobile plans in long term interests of competition and consumers”, for more information.

6 THE PROCESS FOR LODGING A COMPLAINT AND HOW TRA WILL ASSESS SUCH COMPLAINTS

272. This section of the Guidelines sets out the process by which parties can lodge complaints to TRA regarding potential breaches of Article 65 or the relevant anti-competitive provisions in an operator's licence. It also explains how TRA will subsequently deal with such complaints. A flow chart of the complaint process can be found below. A template for the submission of complaints to TRA is provided in Annex 2.

6.1 Submission

273. In order to enable TRA to identify those allegations that raise real concerns and therefore direct resources appropriately, sufficient evidence is required to support any complaint regarding alleged anti-competitive behaviour. That is, a complaint must be specific. A general reference to a potential breach of the Telecommunications Law without reference to the specific article(s) of the Telecommunications Law, the alleged abuse and breach will not be considered adequate. A complaint will normally also not be accepted without all of the evidence required for TRA to properly assess it. For example, any allegation about anti-competitive pricing will require the submission of price and cost data. Although a complainant is unlikely to know a competitor's costs, a reasonable attempt to estimate them should be made. This could be based on the complainant's own experience and/or on benchmarking.

274. Annex 2 provides a template setting out the information that should be submitted as part of any complaint. TRA advises complainants to prepare their submissions using this template.

275. Unless marked by the complainant as confidential, TRA will treat all information as non-confidential. Where the complainant considers that any of the information provided might damage its commercial interests if it were to be disclosed, it should provide a separate "non-confidential" version of its submission. TRA will evaluate all requests for confidentiality in line with relevant legal provisions and TRA's published guidance on the treatment of confidential and non-confidential information.⁸¹

276. TRA expects that this complaint process will primarily be used by operators who are either competitors or customers of the target operator. However, any individual retail customer can lodge a complaint to TRA. In such instances, TRA will be flexible with regards to the evidence expected from the complainant.

6.2 Investigation

277. Based on the specific details of the complaint, TRA will decide whether it is necessary to open an investigation into the complaint. If in the course of the investigation it becomes evident that there may be further potential breaches, TRA may, at its own discretion, expand the scope of the original investigation.

⁸¹ TRA, A Guidance Paper issued by the Telecommunications Regulatory Authority on its treatment of Confidential and Non-confidential Information, Guidance Paper No. 2 of 2007, 10 September 2007.

278. It is likely that TRA will have to prioritise complaints and manage investigations in a manner which effectively utilises its time and resources. When prioritising complaints, TRA will seek to balance its specific duties stated under Article 3 of the Telecommunications Law. TRA will also have specific regard to the extent of detriment to be caused by the alleged anti-competitive conduct, the seriousness of the conduct of the target operator as well the public interest.

279. TRA will conduct its investigations in a transparent manner. It will provide, upon request, updates on the progress of the investigation to the parties affected.

280. In order to investigate a complaint it will be necessary for TRA to involve the “target operator” (i.e. the party against which the complaint has been made). Under Article 65(e) of the Telecommunications Law, TRA will notify them:

- “1. that it is investigating a possible breach of the provision of this Article;
2. the reasons that made the Authority believe that a breach has occurred or is about to occur, including any fact or matter which it thinks relevant;
3. such further information as the Authority may require from the Licensed Operator in order to complete its determination;
4. where appropriate, the steps it believes the Licensed Operator would have to take in order to remedy the alleged breach; and
5. giving the Licensed Operator, and any other Person that the Authority considers appropriate to consult, such period as it considers reasonable within which to make written representations in response to the notice.”

281. The next step is for TRA to determine whether a breach has occurred. Article 65(f) of the Telecommunications Law states that:

“The Authority shall then determine whether the act or omission of the Licensed Operator is prohibited pursuant to the provisions of this Article, and shall notify the Licensed Operator and any other Person whom it considers it appropriate to notify of any determination issued by it in this respect and of its reasons for making such determination.

Such determination may include the following:

1. directing the Licensed Operator to do or to refrain from doing such things as are specified by the Authority in the order to remedy, reverse or prevent the breach of paragraph (a) of this Article; and
2. imposing a fine on the Licensed Operator”

6.3 Process for conducting investigations

282. When dealing with a complaint TRA will seek to keep to the following timetable.

- TRA will acknowledge in writing a submission from a complainant within 5 working days of its receipt.
- TRA will then ensure that it fully understands the complaint, decide whether the complaint should be pursued and hence whether an investigation will take place. If TRA considers a complaint submission is incomplete, it may also ask the complainant to provide further information or clarify aspects of its complaint.

- Within 20 working days of receiving a complete submission, the complainant and the target operator will be informed about whether an investigation will be opened.
 - A non-confidential submission will be sent to the target operator (as provided by the complainant).
 - Further information may then be requested from the relevant parties (including the target operator, the complainant and other affected companies). This may include witness statements from relevant personnel.
283. TRA will, with reasonable endeavour, seek to conduct and conclude the investigations within a reasonable timeframe. However, TRA reserves the right to conduct and conclude investigations in order of priority (see above paragraph 278), rather than in the order in which such complaints are received by TRA.
284. In exceptional circumstances, TRA may take necessary action without going through all the steps of this complaint process when TRA considers that there is a prima facie breach of Article 65 of the Telecommunications Law and it is necessary to take urgent action to prevent immediate harm to competition.
285. The flow chart below sets out the various stages of the complaint process and indicates the expected timing of each stage.

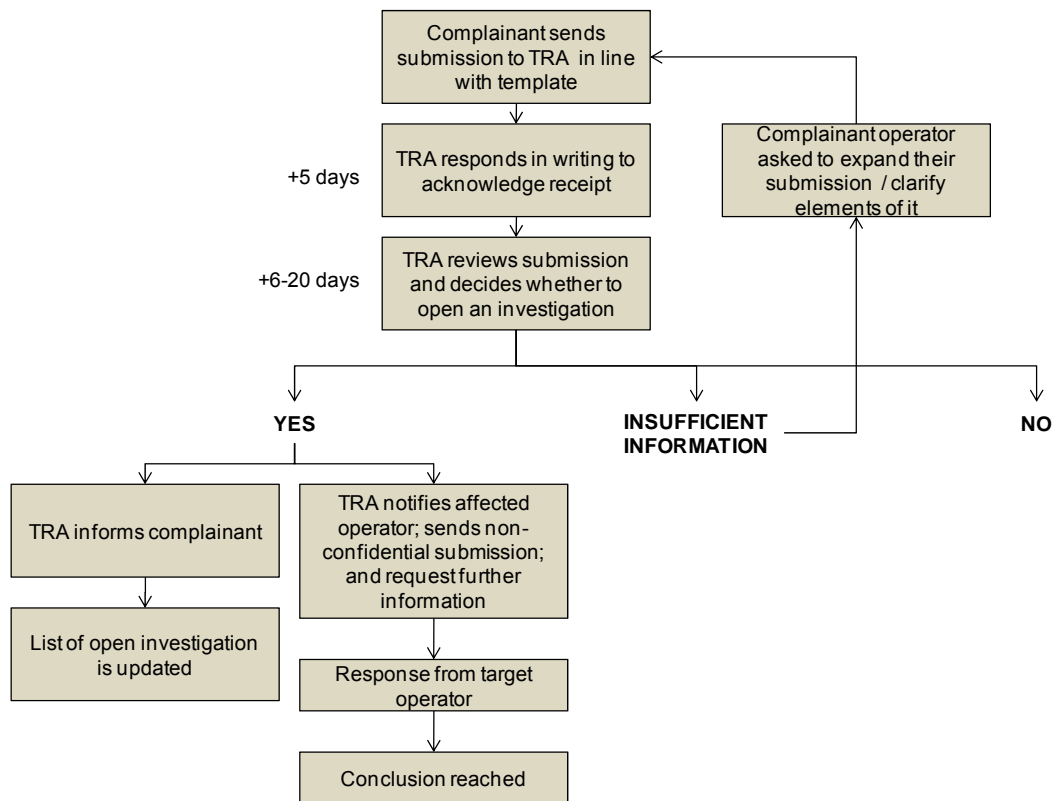


Figure 4: Flow chart of complaint process

286. TRA will respond to any formal requests for an update on the progress of an investigation as quickly as practically feasible, and in any case it will aim to respond no longer than within one month of receipt. As TRA's investigation proceeds and the market develops, TRA may decide that an investigation is no longer an administrative priority and, accordingly may close its investigation without determining whether the target operator did or did not breach Article 65.
287. Finally, TRA will aim to complete cases as quickly as practically feasible, and will provide an explanation if a case remains open two years after it was initiated.

Annex 1: Measuring costs and profitability

288. Many of the tests TRA may need to perform in assessing market power and alleged anti-competitive practices are reliant on cost or profitability data. Estimating cost or profit is complex and involves a degree of judgement. The specific nature of each case must therefore be taken into account.
289. This Annex discusses the various methods available for assessing costs and profitability and indicates which are likely to be most appropriate. However, this is not an exhaustive assessment of the issues or of the potential approaches which could be taken.

Measuring costs

290. Cost data is required to help determine whether pricing is excessive, predatory, or discriminatory; to assess whether margins are being squeezed to determine whether bundling is anti-competitive for example. This section discusses the most appropriate way of measuring costs in order to carry out such tests. It begins with a brief introduction to cost measurement where the meanings of many of the terms which are used throughout this section are defined. It then focuses on some of the specific issues that arise when measuring costs in the telecommunications sector.

Introduction to cost measurement

291. There are many ways to measure costs. Economists typically distinguish fixed costs, i.e. costs that do not vary with the level of output, from variable costs, i.e. costs which vary with the level of output. All of a firm's costs can be categorised as fixed or variable.
292. Another distinction generally made is between direct, joint and common costs. Direct costs are those costs that are directly attributable to the provision of a specific service. Common costs are costs that cannot be directly attributed to any specific services and joint costs refer to costs incurred when the production of one product simultaneously involves the production of one or more other products. Joint and common costs are often referred to as indirect costs.
293. In the context of market and competition analysis, it is useful to define the following types of costs:
- Marginal cost: the marginal cost of a product is the cost of producing an additional unit of output beyond a given level of output.
 - Incremental (or avoidable) cost: the incremental cost of a product is the additional cost incurred by a firm in the provision of a relevant increment (typically the total volume of output of the relevant product). Thus, it refers to product-specific costs. Formally, the incremental cost of a product is the difference between the total cost incurred by the firm when producing all products, including the product under analysis, and the total costs of the firm when the output of the individual product is set to zero.
 - Long-run incremental cost (LRIC): the incremental cost of a product in the long-run when all costs are considered to be variable (i.e., both fixed and

variable costs). As joint and common costs are not considered incremental to the production of any one service, LRIC incorporates all costs except common costs. LRIC can be estimated using top-down or bottom-up approaches.⁸²

- Long-run average incremental cost (LRAIC): the per unit version of LRIC. The incremental cost of producing the current output of a particular product is calculated and then the LRAIC is determined by dividing by the volume of output. Unlike LRIC, this measure is then comparable to a unit price.
- Stand alone cost (SAC): the stand alone cost is the cost that would be incurred if a multi-product firm provided only one of the services that it currently provides. This is effectively the LRIC of that service combined with the full joint and common costs which must be incurred in order to provide that service.
- Fully-allocated cost (FAC): A cost measure which allocates all costs, including those which are joint and common, across the products or services produced based on allocation rules. There are a variety of methods for calculating FAC. LRAIC+ is one such method.
- LRAIC+ (also referred to as LRAIC EPMU): the LRAIC+ of a specific service is the average incremental cost of that service plus a proportion of the relevant common and joint costs. EPMU stands for “equi-proportional mark-up” and is normally determined based on the relative size of the LRIC of the service relative to other services to which the common and joint costs must be allocated.

Specific issues in the telecommunications sector

294. In order to ensure efficient recovery of cost, the presence of large fixed and common cost in the telecommunications industry can require departure from the perfect competition model of marginal cost pricing.
295. In theory, in the absence of significant fixed and common costs, prices in a perfectly competitive market will be set at marginal cost. When there is sufficient competitive pressure from other suppliers, each supplier will be incentivised to undercut the others. However, there is a natural limit on how far price can be reduced. A rational supplier will not set price below the level of the additional costs incurred in the short run as a result of producing one additional unit of output (i.e. below the marginal cost) or it will incur a loss.
296. However, contrary to the hypothetical scenario of perfect competition, the telecommunications sector is characterised by significant fixed and common costs. Deploying telecommunications networks requires major investment or fixed costs which in turn give rise to economies of scale, i.e. decreasing unit costs as output expands. In addition, telecommunications service suppliers often provide more than one service over the network and hence incur common and joint costs across those services. Therefore, they may benefit from economies of scope which means that the unit cost of individual products is lower when they are produced jointly than when they are produced separately.
297. In the presence of large fixed costs and significant economies of scale, the short run marginal cost of an additional unit of output could be very low or even zero. Therefore, pricing at marginal cost would leave the firm unable to recover all of its costs, as by definition all fixed costs would be excluded. Similarly, any joint or

⁸² For example, Batelco has developed a top-down LRIC model which is used for interconnection products.

common costs, which in this industry could potentially be quite significant, are excluded from marginal cost as they are not “incremental” to any specific product.

298. Large common cost also raises the question of the most efficient allocation of cost between services and/or consumers. Common costs can be allocated based on relevant cost drivers (e.g. capacity), on demand elasticity or other allocation rules. This is an important issue especially at a time where the proportion of common cost in the telecommunications industry is increasing with the advent of NGN fixed networks. The application of Ramsey-Boiteux pricing, where common costs are allocated to services in inverse proportion to the elasticities of the services may provide an optimal allocation of common costs, by minimising demand distortions that can otherwise arise when marginal cost pricing is not possible. This second best is an often advocated form of efficient pricing but rarely implemented in practice owing to informational requirements.

Measures of costs used in the telecommunications sector

299. To address the question of fixed and common costs, specific cost measures are commonly used in the telecommunications sectors. They include long run incremental cost (LRIC), long-run average incremental cost (LRAIC) and long-run average incremental cost plus an equi-proportionate mark-up (LRAIC+).

Long run incremental cost⁸³ / Long run average incremental cost

300. A long-run measure of incremental costs incorporates all operating and capital (or fixed) costs, but excludes any “common costs”. In practice, the long run average incremental cost of production (rather than the marginal cost) has been used as a benchmark for price floors, where firms face relatively significant fixed and common costs.⁸⁴

Long run average incremental cost +

301. LRAIC+ is a type of “fully-allocated” cost measure as the joint and common costs of the firm are allocated across the products or services to which they relate on the basis of the relative size of their LRAICs. Therefore, in total all costs of the business are allocated to specific services. If joint and common costs exist, setting the prices of all products or services in line with LRIC would not allow an efficient operator to break even, as those common costs would not be recovered. If a fully-allocated cost measure was used, this would ensure that common costs are taken into account.
302. However, the basis for allocating common costs across products or services can be a fairly subjective area and using different drivers can generate different cost estimates for individual services. As such, the fully allocated cost of a particular service is likely to be dependent on the cost drivers used.⁸⁵

⁸³ See OFT, “*Competition Act 1998: The application in the telecommunications sector*”, for a further discussion of the application of incremental cost.

⁸⁴ LRIC was described as being a more appropriate standard for assessing anti-competitive practices than average variable cost in a market where fixed costs were high in relation to an assessment of predatory pricing in the postal market. The long-run incremental cost standard was applied to test for predatory pricing by the European Commission in the Deutsche Post case (Deutsche Post AG (2001)).

⁸⁵ The fully allocated cost for an individual service could vary between its incremental cost (in the case that no common costs are allocated to that service) and its stand alone cost (“SAC”) (where the SAC measures the price of producing the product on its own and is calculated by allocating all the common

Conclusion

In a competitive environment a telecommunications operator with significant fixed and common costs would seek to set prices in order to recover these costs. In practice, LRAIC is effectively a “price floor” and SAC (the stand-alone cost of producing the service, which therefore incorporates the full amount of any joint and common costs) is effectively the “price ceiling” and prices in a competitive market would generally be expected to fall somewhere in between. TRA notes that LRAIC is typically used as a price floor in investigations of alleged anti-competitive practices. LRAIC+ tends to be a widely-used approach to proxying the level of prices that would be required to recover fixed and common costs in the telecommunications sector, and is also reasonably straight-forward to implement.⁸⁶

Measuring profitability

303. In order to determine whether a firm possesses market power or whether this power has been abused, TRA may assess a firm’s profitability. This section looks at how profitability may be measured; some of the specific issues which might arise when conducting such an assessment and how the results should be interpreted.

Measures of economic profitability⁸⁷

304. There are a range of possible measures of economic profitability. The three which are most relevant to competition assessments are:
- Internal rate of return (IRR) – this is the internal discount rate on the cashflows generated by the entity over its lifetime which ensures that the net present value of those cashflows is zero. As a regulator will not normally be considering the performance of the entity over its economic lifetime, a truncated IRR measure tends to be more commonly applied. This can be measured over a shorter period of time, although reliable information on cashflows and asset values at the start and end of the period are required. In theory though, this is the most accurate indicator of economic profitability.
 - Return on capital employed (ROCE) – this relates profits to underlying investment over a specific period. Providing the profit and investment are measured on an economic basis, ROCE, in theory, should be equivalent to a truncated IRR over the same period. In most cases, the ROCE can be easier to calculate.
 - Return on turnover (ROT) – this relates profits to the level of turnover and can also be referred to as the profit margin. Although this measure is less commonly used than ROCE, if an equivalent ROCE cannot be calculated, it

costs associated with producing a group of products to that one product). The application of Ramsey-Boiteux pricing may provide an optimal allocation of common costs, but in practice, the application of Ramsey-Boiteux pricing in regulation and competition cases has been limited by the availability of information on demand elasticities, which is necessary to estimate Ramsey-Boiteux prices.

⁸⁶ Batelco’s interconnection products whose charges are approved by TRA are based on LRIC plus a mark-up for fixed common and joint costs.

⁸⁷ See, for example, OFT, “*Assessment of conduct: Draft competition law guideline for consultation*”, April 2004, for a discussion of economic profitability and Oxera, 2003, *Assessing profitability in competition policy analysis*, Economic Discussion Paper No 6 prepared for OFT.

can provide a reasonable alternative measure – this is explained further below.

305. When conducting a profitability assessment, TRA will consider how easily each of these measures can be calculated and on a case-by-case basis decide on the most appropriate approach to take. Without prejudice to this, it envisages that in most instances the ROCE is likely to be used, although this will be affected by data availability.

Profitability at a product/market level

306. Assessments of allegations of anti-competitive behaviour will normally be based on the profitability of a specific product or relevant market, rather than the overall profitability of an undertaking. The multi-product nature of telecommunications operators raises the issue of how to allocate common costs, revenues and capital against the products or services produced by an undertaking. Consequently, it can be difficult to define profitability at the appropriate level with certainty. However, TRA will, where possible, make use of separated regulatory accounts as a primary source of information on costs, revenues and capital by product, although where necessary, TRA will develop allocations based on its own judgement. If it is not possible to generate a reasonable estimate of the capital associated with the provision of a particular service, but costs and revenues can be sensibly allocated, then it may be appropriate to use return on turnover as a measure of profitability.

Competitive benchmark

307. Under competitive conditions, an undertaking would normally be expected to earn “normal profits”. This is the level of profit necessary to provide a sufficient return to the company’s shareholders and debt holders. Consequently, an appropriate benchmark against which to compare the ROCE or truncated IRR is the weighted average cost of capital (“WACC”) over the relevant period. Effectively this measures the combined cost of debt and equity.⁸⁸ If the ROCE or the truncated IRR exceeds the WACC (where these are measured over the same period), then this indicates that “supra-normal profits” have been generated. Conversely, if the ROCE or the truncated IRR is below the WACC, profits have been excessively low. However, before drawing conclusions from such findings, it is very important to consider the time period over which the assessment has been made.
308. If ROT has been used to measure profitability, then a different benchmark is required. Considering the returns earned on a large sample of other companies and taking an average across them is the most common way of trying to benchmark ROT. Clearly, this is not always a reliable indicator of a competitive level of return as it assumes that the firms in the sample all face the same risks as the firm under analysis and that they all operate in competitive markets. Therefore, this measure of profit should only be used in circumstances where it is not feasible to make a reasonable estimate of the equivalent ROCE.

Are returns above the cost of capital evidence of excessive profitability?

309. In considering whether prices have been set above the competitive level as a result of an abuse of market power, TRA will look for evidence of persistently high

⁸⁸ In some cases, where a firm is involved in multiple activities, the WACC associated with specific activities may differ from that for the company as a whole, according to the risks entailed.

profits. This is the approach taken in the UK for example. In its published guidelines the UK Competition Commission states that:⁸⁹

“...a situation where, persistently, profits are substantially in excess of the cost of capital for firms that represent a substantial part of the market could be an indication of limitations in the competitive process... Therefore, in the context of a market reference, the Commission will normally consider profit levels, usually in terms of rates of return on capital in the market or markets concerned as a further indicator of competitive conditions.”

310. Persistence is necessary because prices and hence profits can legitimately exceed the competitive level over the short run.⁹⁰ In particular, over a product or service’s lifecycle (especially where the upfront investment required is substantial), it would be expected that profits will initially be negative, gradually increase, and then potentially decline towards the end of the product’s lifecycle. Therefore, if profits are only assessed at a point in time, a potentially misleading picture of profitability may emerge. For example, a longer term view might indicate that profitability over the whole product lifecycle has not been unreasonable, even if, at one point, ROCE appears to be above cost of capital. Figure 5 provides an illustrative example.

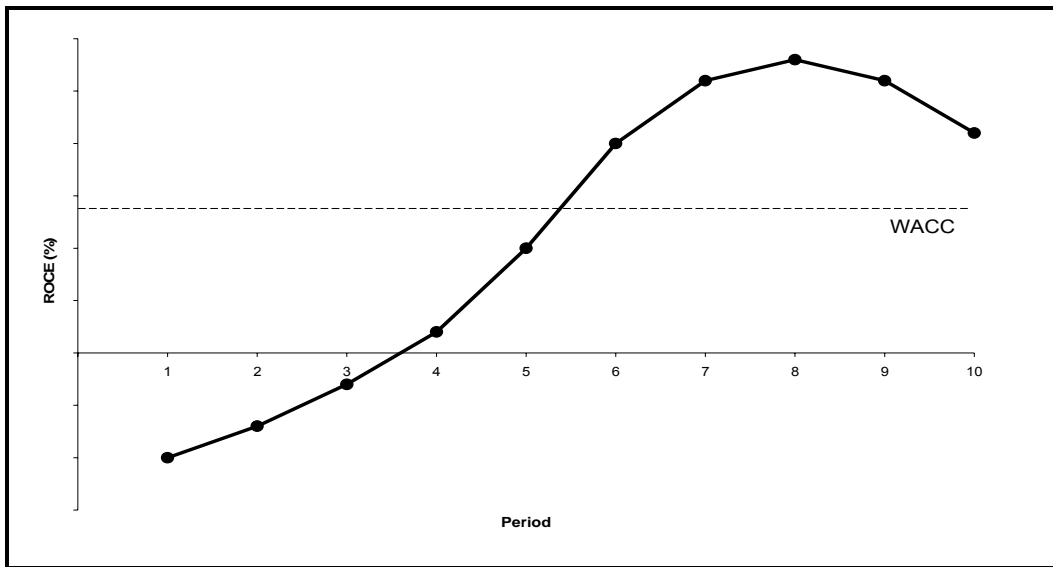


Figure 5: Illustration of ROCE & WACC over the lifecycle

311. Consequently, TRA will need to collect profitability data over a reasonable historic period and potentially forecasted into the future (depending on whether a backward- or forward-looking analysis is being performed).

Using financial data to assess costs and profitability

312. Statutory accounts or regulatory accounts will normally be the most readily available source of financial data to enable TRA to review the costs or profitability

⁸⁹ See “Market Investigation References: Competition Commission Guidelines”, June 2003

⁹⁰ Note that excess profits could also be due to the firm achieving cost efficiencies which in the short run have not been passed through to consumers.

of a specific firm. However, the aim is to measure economic costs and economic profitability, and therefore accounting based data may not be fully appropriate and may have to be modified. TRA may need to make certain ad-hoc adjustments to the accounting based figures so that they better reflect economic costs and profits. Such adjustments may only be necessary where the accounting based figures would produce, absent adjustments, a distorted picture of economic costs and profits and where adjustment would have a material effect on the results of an analysis of costs or profitability. Some of the adjustments which could be necessary when dealing with accounting data include the following.

- Re-stating depreciation – Accounting depreciation is often determined on a straight line basis (i.e. the same charge is made each year). However, this may not relate to the actual consumption of the services of the asset. For example, depreciation of a network should increase as use of the network increases.
- Revaluing fixed assets – Fixed assets are often valued in the statutory accounts on the basis of their historic cost. A revaluation of assets based on the current value of a modern equivalent asset (after adjusting for age) may be justified where fixed costs represent a large proportion of total costs and where the historic cost of assets is materially different from their replacement cost. This will more closely reflect what a new entrant would need to spend to compete with the incumbent. Consideration will also be given to whether the assets are replicable.
- Capitalising investment in brand / marketing / R&D – From an accounting perspective, neither of these investments would normally be capitalised. However, to the extent that they are long lasting intangible assets, investing in them results in benefits to the company over time, and the costs incurred are significant, it may be appropriate to capitalise them. Such intangible assets would need to be amortised over time.
- Capitalising customer acquisition costs – A retail telecommunications service provider may spend a lot of money acquiring each customer with the expectation that they will generate returns in the future. Hence it may be appropriate to amortise these costs over a number of years, e.g. the average life of a customer.
- Capitalising handset subsidies – If a telecommunications operator provides a subsidy on handsets, revenue may be recorded in the accounts at the reduced price without taking this into account. In fact the subsidy is a form of longer term investment or customer acquisition cost which can be spread over time.
- Recognising assets on operating leases – An operator may not own all of the fixed assets that it uses. If fixed assets are obtained through an operating lease then these assets will not be recognised in the lessee's accounts. To ensure a more accurate ROCE estimate, these assets should be captured in capital employed as some part of the returns will be due to the use of such assets.

Annex 2: Template for submitting a complaint for anti-competitive conduct to TRA

Complaints should be submitted to:

[●relevant contact details]

If you need any further guidance on how to submit a complaint to TRA, please contact [●].

Note: TRA may send a non-confidential version of your submission to the parties named in your complaint. If your submission contains confidential information, you should provide a separate non-confidential version which can be sent to the “target operator” (i.e. the party against which your complaint is made).

Unless you specifically request TRA not to do so, with adequate justifications, TRA will disclose your business name to the target operator. TRA recognises that there are some circumstances in which complainants prefer to remain anonymous (for example, where disclosure of the complainant may prejudice ongoing commercial relations with third parties), but that may hinder full explanation of the problem to the target operator, thus limiting the effectiveness of the investigation. TRA reserves the right to not continue an investigation if it determines that such anonymity will make the investigation untenable.

A submission should contain the following information:

Section A - Preliminary information

- Summary of complaint:
- Business name, address, telephone/fax number, and/or e-mail address and, if relevant, the contact details of a person who can discuss the detail of the complaint.
- A brief explanation of the nature of your business and its scale (local, national, international, approximate turnover).
- Details of the target operator(s), including details of any relevant contact within the target of the complaint.
- Details of the relationship between the complainant and the target operator(s) (such as whether the complainant is a customer and/or a competitor of the target operator).
- Names of other industry members who can support the complaint.

Section B - Details of the complaint

- Legal basis: Provide an indication of whether the breach relates to Article 65(b)1 or 65(b)2 of the Telecommunications Law and/or of specific licences conditions;
- The relevant market(s) in which the breach was committed and other relevant market(s). The products and/or services concerned (including details of supply and demand for the products/services concerned);
- Dominance in the relevant market(s) by the target(s) of the complaint and discussion of the market position of the target operator(s) in the relevant market(s);

- A description of the nature of the alleged breach, citing specific abuses, conducts or breach where possible, e.g. predatory pricing;
- A description of the effect of the alleged breach, including how the complainant's business has been affected by the alleged activity;
- A detailed chronology of events (where appropriate);
- Relief/remedy sought including details of the timing/urgency of the complaint with reasons.

Section C - Factual evidence supporting the allegation and verification by an officer of the company

This section must contain details of the factual evidence including e.g. cost and price data; customer numbers; margin squeeze test; copies of any relevant documentation, notes of telephone conversations, minutes of meetings, board papers etc or communications (e.g. emails) involving the target/complainant that provides evidence of the alleged anti-competitive activity available to support the allegation made. The types of evidence you would supply will vary greatly depending on the nature of the complaint.

Declaration by an officer of the company or by a person if the complaint comes from an individual:

The information provided in this submission is correct and complete to the best of my knowledge and belief.

Signed:

Position in the Company:

Date:

Section D - Other relevant information

All supporting information should be provided with the complaint, including, for example any of the following.

- Copies of any relevant industry reports/consumer surveys, price and marketing brochures of competing offers;
- Details of any similar complaints/investigations/proceedings concerning the same or similar products/services in other jurisdictions (for example, an investigation by the EC, a competition authority or a regulator).