



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority

Retail Tariff Notification Guidelines

Guidelines issued by the Telecommunications Regulatory Authority

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Purpose: To provide guidance to licensed operators with Significant Market Power on how to notify retail tariffs and to comply with the Retail Tariff Notification Regulation.

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List of Acronyms

| | |
|------------|---|
| CATs | Customer Access Tails |
| FAC | Fully Allocated Cost |
| LLCO | Local Leased Circuit for Other Licensed Operators |
| LRAIC | Long Run Average Incremental Cost |
| LRAIC+ | Long Run Average Incremental Cost plus a mark-up |
| LRAIC+EPMU | Long Run Average Incremental Cost plus an Equi-Proportional Mark-Up |
| LRIC | Long Run Incremental Cost |
| PABX | Private Automatic Branch Exchange |
| SMP | Significant Market Power |
| TRA | Telecommunications Regulatory Authority of the Kingdom of Bahrain |

1 INTRODUCTION

1. These guidelines have been developed by the Telecommunications Regulatory Authority of the Kingdom of Bahrain (“TRA”) within the context of the Retail Tariff Notification Regulation (the “Regulation”).¹ They are intended to assist licensed operators that have been determined by TRA to have Significant Market Power (“SMP”) in a relevant retail market (“Notifying Operator”) in complying with the notification process, and in particular on how to perform the required tests.
2. The Guidelines do not legally bind TRA. TRA reserves the right to consider other elements and to depart from the Guidelines where appropriate. If TRA were to take an approach which involves a significant departure from the Guidelines, then TRA would provide an explanation for doing so.
3. Relevant terms are defined in the Retail Tariff Notification Regulation.

1.1 Objective

4. The retail tariff notification framework applied to all Licensed Operators determined by TRA to have significant market power in any relevant retail markets and which intend to introduce, change or withdraw Retail Tariffs in any of those retail markets in which it has been determined by TRA to have SMP. The framework has been introduced to permit the tariffs for these services to be altered on a timely basis while providing sufficient safeguards to support the development of competition in these markets and to protect consumers.
5. The framework is based on a set of Tariff Controls as set out in Article 6 of the Regulation. The expressions tariff controls, notification obligations and obligations are used interchangeably in this document.
6. The tariff controls are designed to ensure consumers (i.e. actual and potential users and subscribers) are protected and that the notified tariff is not associated with anti-competitive behaviour.
7. It is the responsibility of the Notifying Operator to demonstrate, to the satisfaction of TRA, that any retail tariff it wishes to introduce or modify complies with the relevant tariff controls. In the event that on the basis of the quantitative evidence presented, the proposed tariff does not appear to be compliant, the Notifying Operator is required to provide appropriate reasons why the proposed tariff is nonetheless compliant with the applicable tariff control. Providing this is achieved and no concerns are raised by TRA within the allotted timeframe, the tariff may be implemented.
8. The guidelines explain how retail tariffs should be notified and how operators with SMP can ensure compliance with the Regulation. The guidelines cover the following:

¹ TRA, Retail Tariff Notification Regulation, 2010.

- Tariff controls;
 - the information and analysis that the TRA recommends that the Notifying Operator should submit in relation to each obligation in order to comply with the notification obligations; and
 - illustrative examples to show how a Notifying Operator could demonstrate that their tariff complies with the obligations.
9. The notification form which must be completed by a Notifying Operator wishing to notify a tariff is available from TRA.

1.2 When should TRA be notified by a Notifying Operator under the Regulation?

10. The tree diagram below provides guidance on the process to be followed by a Notifying Operator notifying changes under the Regulation to existing tariffs or the introduction of new retail tariffs for retail telecommunications services which it provides.

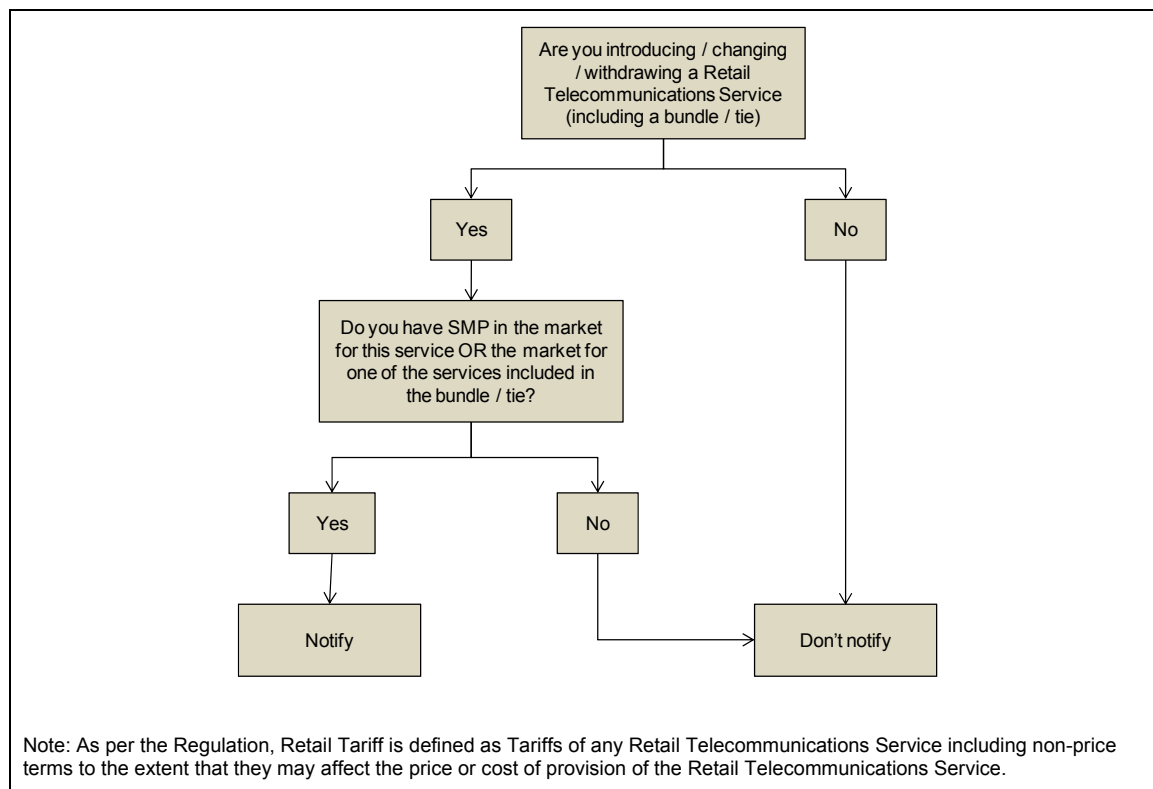


Figure 1: Decision tree diagram – Does TRA needs to be notified under the Regulation?

11. The Regulation covers those elements of a retail telecommunications services tariff which relate to licensed retail services. As such, any element outside of this definition, for example, information on payments for a part of the service such as an itemised bill, would be considered beyond the scope of the Regulation and hence beyond the scope of these guidelines. However, issues relating to such

services may be covered by other regulatory measures or provisions. If in doubt, enquire with TRA.

12. TRA must be notified of any change in the price terms of an existing or a new retail tariff for a retail telecommunications service offered by an operator that has been designated as having SMP in the market for that product or service. Ancillary services that are necessary for a retail telecommunications service (e.g. connection for a leased line or a fixed line service) should be notified as part of the retail tariff for that service.
13. In addition, the Regulation applies to changes in the non-price terms of a tariff, to the extent that such changes could be expected to materially affect the effective amount payable by consumers or the cost incurred by operators (see examples in the Box below). If in doubt, enquire with TRA. Examples of non-price terms that are expected to have an impact on the effective price and/or cost of a service include, but are not limited to, the following:
 - contract length (which could be used as the period over which any fixed fees are annualised in order to determine the overall effective price);
 - quality of service (which would affect the cost of providing the service);
 - the value of ancillary goods or services provided with the service;
 - time taken to provide the service (which would affect the cost of providing the service);
 - maintenance terms (which would affect the cost of providing the service); and
 - minimum call periods for which callers are charged (which would influence the effective price of usage and hence the overall effective price).

When should TRA be notified: Two hypothetical examples

Example 1: Provision of a free PC when a new customer signs a 1-year broadband contract

This offer would need to be notified to TRA as the provision of a free PC: (a) would constitute a change to non-price terms; *and* (b) would be likely to affect materially the cost of providing the broadband service. Note that the offer would not be considered a bundle under the definition of bundle in the Regulation.²

Example 2: Increase in the email box size of the email service offered with a broadband service

While the increase in the email box size would constitute a change to non-price terms, it is unlikely to materially affect the cost of providing the service and hence it would not be expected to require notification. The incremental cost of the additional storage is unlikely to be significant relative to the overall cost of the broadband service. (Note, however, that a case-by-case assessment should be made by operators as an extreme change in additional storage could significantly increase the cost of providing the service).

² The Regulation refers to bundle of "Retail Telecommunications Services".

14. Finally, an operator should notify TRA of any proposed withdrawal of controlled tariffs, in which case the tests do not apply provided. The withdrawal of temporary tariffs, i.e. tariffs that are offered by the Notifying Operator for six (6) months or less, are not required to be notified.

1.3 Tariffs that are subject to a rebalancing plan

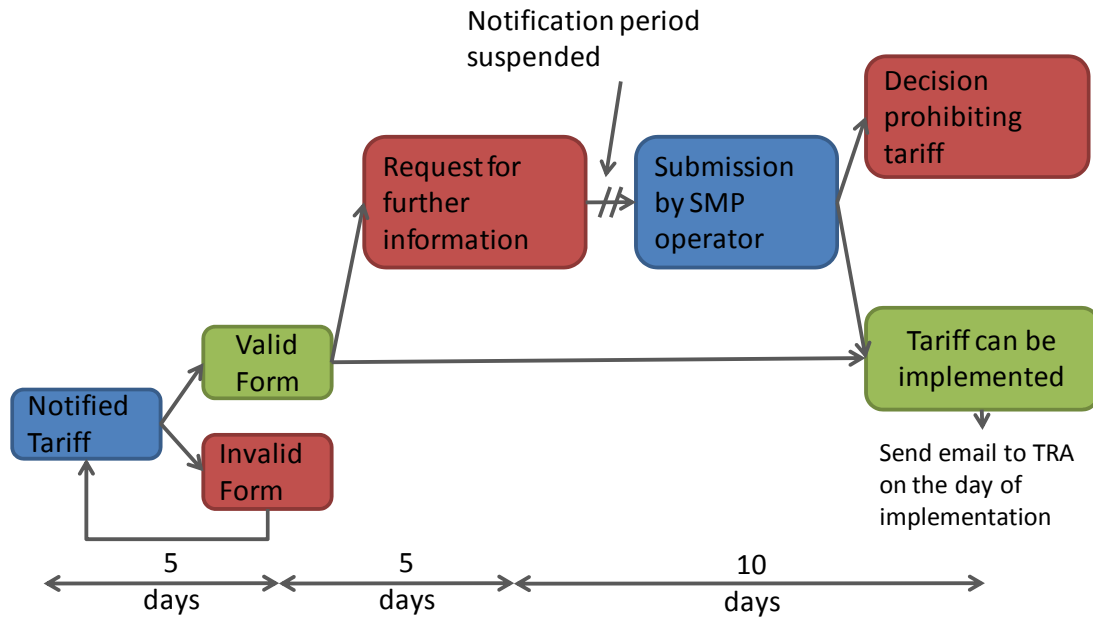
15. If a tariff meets the criteria for notification and is also affected by the terms of a rebalancing plan or similar arrangement, then a Notifying Operator should still perform the relevant tests and submit the results to TRA. Further guidance on the implications of a rebalancing plan or similar arrangement is provided under the descriptions of the proposed analysis to demonstrate compliance with the tariff controls.

1.4 Investigation under Article 65 of the Telecommunications Law

16. The retail tariff notification process does not preclude TRA from initiating an investigation pursuant to Article 65 of the Telecommunications Law. The implementation of a notified tariff is conditional on the information submitted at the time of the notification. Changes in the information available to TRA could warrant an Article 65 investigation. For example, this could be as a result of (but not limited to):
 - new information becoming available;
 - errors coming to light in any of the information already provided under the notification process;
 - evidence arising of the actual impact that the tariff has on the market or the expected impact that the tariff will have on the market.

2 THE NOTIFICATION PROCESS

17. The flow diagram below sets out the retail tariff notification process defined in the Regulation (for illustrative purposes only).



As defined in the Regulation, "days" refers to working days

Figure 2: The Retail Tariff Notification Process (for illustrative purposes only)

18. In exceptional and unforeseeable circumstances, TRA may at its discretion allow the Notifying Operator to apply a Notified Tariff before the end of the Notification Period. For example, this could apply in cases of mourning periods.

3 SHOWING COMPLIANCE WITH THE RETAIL TARIFF CONTROLS

19. This section describes how a Notifying Operator can demonstrate compliance with the tariff controls set out in the Regulation.
20. Each tariff obligation and the associated recommended analysis that a Notifying Operator could use to assess a tariff is described. In addition, the information and data that an operator is recommended to supply is set out. The notification form issued by TRA pursuant to the Regulation must be completed by the Notifying Operator.
21. Note that failing the quantitative part of the recommended analysis does not necessarily imply that a notified tariff is in breach of the associated tariff control. This is explained in more detail under the explanations of each of the specific tariff control below.

3.1 Tariff controls for which evidence must be submitted

22. The Regulation contains the following Tariff Controls:
 1. No undue discrimination
 2. No excessive pricing
 3. No margin squeezing
 4. No predatory pricing
 5. No abusive bundling (or tying)
23. In accordance with the Notification Form, the Notifying Operator shall include in the form:
 - a margin squeeze analysis - when a wholesale product exists and/or is required as per Article 3.2 of the Regulation to allow a competing operator to replicate the services offered by the Notifying Operator at the Controlled Tariff;
 - a predatory pricing analysis - when a margin squeeze analysis is not required; and
 - an anti-competitive bundling analysis in the case of a Bundle or Tie.
24. Where a tariff passes a margin squeeze test, there is in principle no need to also perform a predatory pricing test as a tariff that passes the margin squeeze test is expected to be compliant with the no predatory pricing obligation.
25. TRA may require the Notifying Operator to perform additional tests relating to other Tariff Controls set out in the Regulation. Price discrimination and excessive pricing are unlikely to represent significant issues in every case of and therefore they are not incorporated into the standard tariff notification requirements in order to minimise the burden on a notifying operator associated with completing the retail tariff notification form.

Period covered by the tests: the current year and subsequent year

26. As the tests are prospective in nature, TRA is proposing that, where possible, they should be performed using data for the “current year” and the subsequent year. The “current year” should cover one year from the date on which the new tariff or the change in an existing tariff is expected to be implemented, and the subsequent year covers one year from the end of the “current year”. TRA expects that the most recent regulatory accounts will form the basis for “current year” costs. TRA notes that the period covered by the regulatory accounts may be different from the “current year”. If costs are expected to change between the regulatory accounting period and the “current year” then appropriate adjustments could be made, but if no material changes are expected then the existing data should be used.
27. The forecast cost data for the subsequent year could be estimated in a similar manner, by taking the cost data for the current year as the basis and adjusting it where necessary. All assumptions used to modify the current year cost for the subsequent year should be documented and justified. Similarly adjustments to the cost information from the regulatory accounts for the current year, if any, should be documented and justified.
28. If a notified tariff change is “temporary”, i.e. implemented by the Notifying Operator for twenty four (24) weeks or less before reverting to the prior terms, then cost data need only be provided for the period of the tariff change.

Treatment of multi-part tariffs

29. A multi-part tariff is a tariff made up of a number of elements – for example an upfront charge, a monthly rental which may or may not include allowances (e.g. volume minutes and/or data) and a usage charge.
30. If the tariff to be modified is part of a multi-part tariff, TRA recommends calculating a measure of the overall annualised effective price (or expected price, if based on expected usage) that a consumer will face (i.e. the amount that they will effectively be charged over the period of a year)– see section 5.1 for more details.

Measurement of costs

31. For ease of explanation, the generic term “cost” has been used throughout the document, when describing the specific tests to be followed under the recommended analysis. Section 5.2 includes a matrix which indicates which cost standards are recommended to perform each of the tariff notification tests, where the recommended analysis is followed.
32. As explained in paragraph 104, the cost data should be derived from the most recent set of regulatory accounts, where available. However, in some instances, the costs stated in the regulatory accounts could be adjusted to more closely reflect their true economic value. This relates predominantly to instances where certain types of costs (e.g. marketing and advertising) are incurred in one year but the benefit from these costs will be obtained over time. Where these costs are particularly large, they may be capitalised and amortised over an appropriate

period (i.e. over a period longer than the accounting period) – see section 5.2 for more details.

3.2 Undue discrimination

Tariff obligation

33. The Regulation defines the no price discrimination obligation as follows:

No undue price discrimination: The Notifying Operator may not set a Controlled Tariff such that the price or the accompanying non-price terms are differentiated across Users, unless this can be justified by reference to differences in the expected level of the underlying costs of provision or expected material improvements in consumer benefits. If it cannot be justified to the satisfaction of TRA in either of these ways, such Controlled Tariff will be considered unduly discriminatory.

34. This obligation only applies to tariffs which relate to a certain sub-segment of a market. If a tariff applies to all customers within the market, then price discrimination would not be considered a relevant issue.

35. This obligation is necessary to prevent an operator with SMP from behaving in an anti-competitive manner towards a sub-segment of the market. This behaviour may be exploitative, in terms of setting higher prices for a segment, where there is no cost- or demand-based justification for doing so. Alternatively, the behaviour may be exclusionary, by setting lower prices for a segment which again cannot be justified on the basis of cost or demand conditions.

36. Price differentiation (like non-price discrimination) can be justified by an operator with SMP on the grounds of an underlying cost differential. In other words, if the cost of supplying one group of customers differs from the cost of supplying another group, then it would be reasonable to expect prices to differ. Alternatively, if there is no underlying cost differential, price differentiation can be justified due to an expected increase in demand or the opening up of new market segments as a result of such differentiation. In these instances, price (and non-price) differentiation can lead to efficient pricing and improve welfare. If neither reason can be given, and absent wider social or policy objectives which necessitate a price differential, then an operator with SMP must not discriminate between its customers by charging them different prices.

Recommended analysis

37. The Notifying Operator may provide evidence of no undue discrimination in its Notification Form but is not obliged to do so. If TRA considers that discrimination may be an issue for the notified controlled tariff, TRA may subsequently ask the Notifying Operator to provide evidence that it has met this obligation (and the notification period will be suspended accordingly).

38. To provide evidence that a tariff meets the no undue discrimination obligation, it is recommended that the analytical framework set out below is followed. Other approaches could be taken, although if so, TRA may need to request further

information before coming to a decision, or may not be able to accept the analysis provided at all.

39. If the price or accompanying non-price terms appear on the face of them to be discriminatory the Notifying Operator could provide evidence to show that either significant cost variations exist or the price or non-price differentiation can reasonably be expected to materially increase demand and hence benefit consumers. The Notifying Operator would also have to show that the differentiation is necessary to benefit consumers and that competitors would not be foreclosed from the market (if relevant).
40. Alternatively, if the price discrimination relates to wider social or policy objectives, then this would require explanation and justification.
41. Consequently, the following information could be provided:
 - Price and accompanying non-price terms of similar products sold by the Notifying Operator that fall within the same relevant market.
 - Cost data for the current year and subsequent year relating to the provision of the service to different consumers or consumer groups.
 - Calculation of price ratios and cost ratios to indicate that any price differential is of a similar magnitude to differences in the costs of provision.
 - The objective of the strategy and why this strategy is justified - if the Notifying Operator believes that their behaviour will benefit consumers and increase demand (i.e. how the Notifying Operator believes that its behaviour will benefit consumers and increase demand) or create other wider social benefits (if relevant).
 - Demand forecasts in relation to the different retail offers (if relevant).

Evidence that this obligation is met

42. If the Notifying Operator is following the recommended analysis, then they would need to show one of the following.
43. Either:
that the ratios between the costs of similar services which fall within the same market are of a similar magnitude to the ratio between the annualised effective prices of these services and hence are non-discriminatory.
44. Or:
that the impact on demand is such that the differentiation will be beneficial. Justification for this should be provided, including, where relevant, demand forecasts or an explanation of the expected wider social or policy benefits.

Example (1) – Broadband - under recommended analysis

A Notifying Operator wants to replace their standard business broadband tariff with two separate tariffs – one for companies with less than 10 connections and one for companies with more than 10 connections, while continuing to offer exactly the same service in both cases.

Rather than being charged BD175 per month per connection for unlimited usage, if a

company has less than 10 connections it will be charged BD190 per connection and BD150 per connection if it has more than 10 connections.

The Notifying Operator provides supporting evidence including disaggregated cost data indicating that the costs associated with providing retail broadband services to businesses with more than 10 connections is 75% of the cost of providing broadband services to businesses with less than 10 connections.

Therefore, this tariff change would be considered to meet the “no undue discrimination” obligation, as the evidence shows that the difference between the prices is supported by an equivalent underlying difference in costs (i.e. the price ratio is 78.9% and the cost ratio is 75% - measured relative to the tariff for companies with fewer than 10 connections).

Example (2) – Fixed line access – under recommended analysis

A Notifying Operator wants to introduce a new private automatic branch exchange (“PABX”) tariff for fixed line access for business customers.

It plans to offer a guarantee that all breakdowns will be resolved within the same business day, which is faster than for the standard service. This maintenance service is also included in the price of the PABX service.

It provides evidence which indicates that a price differential exists between the new service and the closest equivalent existing service. The price ratio is 150%, measured relative to the original service. The company claims that this reflects the cost differential associated with this superior level of maintenance, but the cost ratio is only 110%.

Therefore, although the two products are being sold at different tariffs, the size of the difference does not seem justified. The difference in the cost of provision, given the differing non-price terms, is significantly smaller than the difference in prices. In addition, no resulting increase in demand is expected.

Consequently, absent any other justification, this tariff change could be considered not to meet the “no undue price discrimination” obligation.

3.3 Excessive pricing

Tariff obligation

45. The Regulation defines the no excessive pricing obligation as follows:

No excessive pricing: The Notifying Operator may not set a price for a Controlled Tariff such that at the time of its introduction the retail price could be expected to significantly exceed the price level anticipated under competitive market conditions.

46. This obligation only applies to the introduction of new tariffs and increases in the prices of existing tariffs. It is generally assumed that a reduction in the price associated with an existing tariff cannot be considered to lead to excessive pricing, if the previous tariff was not itself considered excessive.

47. In a competitive market, prices would not normally be expected to persistently and significantly exceed costs. Under this rule, prices may not be “excessive” in the sense that they may not be substantially higher than the level expected in a competitive environment.
48. The obligation in the Regulation not to price excessively is required in order to protect consumers from potentially exploitative behaviour, in terms of unjustifiable price increases or high prices, by a firm with SMP. In a market where there is insufficient competition, consumers lack alternative options. Therefore, in the absence of ex-ante regulation, a firm’s pricing behaviour is not adequately constrained by consumer behaviour, as consumers may not have the option of switching to alternative offers and competitive forces are not sufficient to protect consumers. Consequently, prices could exceed the level that would be expected in a competitive environment.

Recommended analysis

49. The Notifying Operator may provide evidence of no excessive pricing in its Notification Form but is not obliged to do so. If TRA considers that excessive pricing may be an issue for the notified controlled tariff, TRA may subsequently ask the Notifying Operator to provide evidence that it has met this obligation (and the notification period will be suspended accordingly).
50. To provide evidence that a tariff meets the no excessive pricing obligation, it is recommended that the analytical framework set out below is followed. Other approaches could be taken, although in such circumstances, TRA may need to request further information before coming to a decision or may not be able to accept the analysis provided at all.
51. TRA recognises that an ex-ante test for excessive pricing for individual products or services produced by a multi-product firm cannot be definitive. TRA also recognises that where a product offered at the retail level by a Notifying Operator can be replicated by rivals purchasing the necessary wholesale input(s) at cost-oriented prices, the ability of a Notifying Operator to introduce and maintain excessive prices at the retail level may be limited. In assessing compliance with the no excessive pricing obligation, TRA will therefore consider the context in which the retail tariff is proposed. TRA is likely to be more concerned about excessive pricing in highly concentrated markets.
52. If asked for more evidence regarding its compliance with this obligation, a Notifying Operator should show that its tariff is not excessive in the current year and is not expected to be excessive in the subsequent year.
53. Whilst a specific cost measure may not necessarily be the appropriate competitive benchmark in all circumstances, evidence about the costs of provision is important.

54. Evidence submitted could include:
- appropriate cost data relating to the tariffs and the calculation of price-cost differential for the notified tariffs;
 - price or non-price terms for other similar products or services provided in competitive markets in other jurisdictions considered comparable to Bahrain to enable international benchmarking; and
 - specific justifications for pricing in excess of cost.

Evidence that this obligation is met

55. If the Notifying Operator is following the recommended analysis, then they would need to show the following.
56. The annualised effective price of the notified tariff should not be excessive relative to those of similar products/services provided in competitive markets in other comparable jurisdictions (where these exist). This can be confirmed by calculating the differential between these prices for the current year.
57. The annualised effective price of the notified tariff should not be excessive relative to costs. This can be confirmed by calculating the price-cost differential for this tariff for both the current and subsequent years.

Example (1) – Broadband – under recommended analysis

A Notifying Operator wishes to introduce a new high-speed 20MB broadband service and proposes a tariff to TRA.

As this would be a new service in Bahrain, there are no existing offerings to compare it to in Bahrain.

The operator provides evidence of the cost of the service as well as some benchmarks of services in certain European countries.

This evidence shows that the tariff appears to be in line with costs and reflective of tariffs for similar products in Europe. Therefore it would be expected to pass the “no excessive pricing” obligation.

Example (2) – Domestic residential calls – under the recommended analysis

A Notifying Operator wants to increase the price of a residential domestic call from 21 fils per unit to 75 fils per unit.

This increase would result in the price exceeding the cost of providing the service (estimated to be 15 fils per unit) by a significant amount. This could be considered a non-justifiable price increase, unless further explanation was provided.

On its face, this tariff is therefore expected to fail the “no excessive pricing” obligation.

3.4 Margin squeezing

Tariff obligation

58. The Regulation defines the no margin squeezing obligation as follows:

No margin squeezing: The Notifying Operator may not set a price for a Controlled Tariff such that, at the time of its introduction, the difference between the retail price and the price of the relevant corresponding Wholesale Telecommunications Service is such that an efficient competitor could not be expected to sustain a competing service.

59. A vertically integrated operator which has SMP in the upstream market and supplies a key input to its competitors in the downstream market is able to influence the margin which can be earned by a non-integrated competitor. If this is set at a level such that an equally efficient competitor is unable to earn a normal profit, the behaviour would be considered anti-competitive. The situation of interest here is when an integrated operator with SMP squeezes the margin by setting its retail price too low.³

60. Evidence of no margin squeezing should be based on the price of existing wholesale products or, where relevant, the price of proposed wholesale products.

61. This obligation exists to ensure that non-integrated operators are able to replicate the retail offers of an integrated incumbent found to have a Dominant Position in the relevant wholesale market when TRA has required the operator in a Dominant Position to prepare a reference offer. Due to the nature of many telecommunications services in terms of reliance on a large fixed network, the development of competition depends to a certain extent on the use of wholesale network access services. It is therefore important that where such products are mandated, alternative operators are able to use these products effectively to compete at the retail level.

Recommended analysis

62. A margin squeeze analysis is required when a wholesale product exists and/or is required as per Article 3.2 of the Regulation to allow a competing operator to replicate the services offered by the Notifying Operator at the Controlled Tariff.

63. It is recommended that the analytical framework set out below is followed. Other approaches could be taken, although in such circumstances, TRA may need to request further information before coming to a decision or may not be able to accept the analysis provided at all.

64. An assessment should be made about whether an efficient, hypothetical non-integrated competitor would, under the notified retail tariff, be able to earn a positive margin on its retail service. The margin is calculated as the difference

³ The situation where the Notifying Operator seeks to increase wholesale prices will be reviewed under the wholesale regime governed by Article 57 of the Telecommunications Law and the Reference Offer.

between the notified effective retail price and the **end-to-end costs** incurred in offering the service. These end-to-end costs include the effective wholesale price (or proposed price) of the necessary existing (or proposed) input(s) plus the other costs that are incurred in providing the retail service, including operating costs, depreciation and a required return on capital. For the purpose of this test, the downstream costs of the integrated Notifying Operator will serve as a proxy for the downstream costs incurred by the non-integrated competitor.

65. The aim of the test is to demonstrate that the margin in the “current year” is positive and that it is also expected to be positive in the subsequent year. If more than one potential wholesale service exists which could be used to provide the specific retail service, the test should be performed in relation to each of the available wholesale services, unless the Notifying Operator can present to TRA a satisfactory case demonstrating why some of the available wholesale products would not be relevant.
66. Note that if the notified tariff fails the “no margin squeezing” obligation because the price has been set at a ceiling level defined in a rebalancing plan or similar arrangement, the “no margin squeezing” obligation would not be considered to be breached. In other words, the requirements of the rebalancing plan should take precedence.

Evidence that this obligation is met

67. If the Notifying Operator is following the recommended analysis, then they would need to show the following:
68. The margin calculated on the basis described above should not be negative in either the current or the subsequent year. This implies that the notified tariff should not be such that a non-integrated competitor, using the integrated company’s regulated wholesale input(s), could not recover downstream costs, inclusive of a return on capital. Where there are several potential wholesale inputs, this conclusion should be true for each of them, unless appropriate justification for excluding from the test some potential wholesale inputs is provided.

Example (1) – Broadband – under recommended analysis

A Notifying Operator wants to change the monthly rental on its standard domestic broadband tariff for “moderate users”. The rental rate is currently BD25 per month and it plans to reduce it to BD20.

Competitors who wish to offer an equivalent service can purchase either the wholesale ADSL service or the bitstream service of the Notifying Operator.

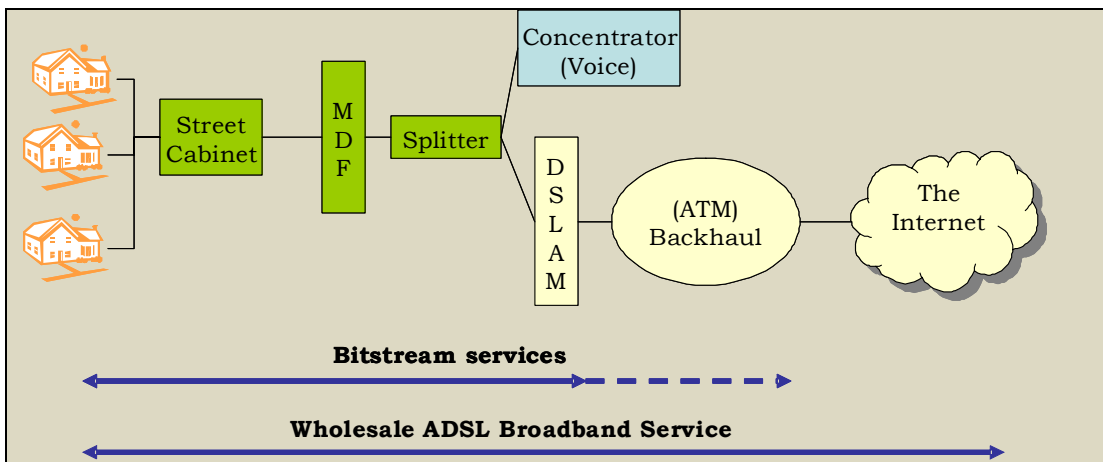


Figure 3: Scope of wholesale ADSL and bitstream service

The diagram above illustrates the scope of the wholesale ADSL and bitstream services. It can be seen that an operator which relies on the bitstream service incurs greater additional costs (essentially transmission and international connectivity) in providing the full retail broadband service compared to an operator who uses the wholesale ADSL service which is a full end-to-end wholesale service.

In order to ascertain whether the new tariff complies with the “no margin squeezing” obligation, the Notifying Operator must calculate the margin achievable by an operator using the wholesale ADSL service and by an operator using the bitstream service.

Note that as retail and wholesale broadband services are both provided under multi-part tariffs (i.e. there is an upfront charge as well as a monthly rental charge), the annualised effective retail price and the annualised effective wholesale price of both the ADSL and the bitstream service must be calculated as explained in paragraphs 29-30 and Section 5.1.

Simplified illustration of test using the wholesale ADSL service (i.e. pure resell of ADSL service)

$$\text{Net margin} = P_R - P_{W_ADSL} - C_{\text{opex}} - C_{\text{depn}} - C_{\text{capital}} \geq 0$$

Where:

P_R = Effective retail price of the Notifying Operator's relevant retail broadband service = 20

P_{W_ADSL} = Effective wholesale price of the Notifying Operator's wholesale ADSL service = 12

C_{opex} = the Notifying Operator's additional downstream operating costs = 2

C_{depn} = the Notifying Operator's additional downstream depreciation = 1

C_{capital} = Required return on capital⁴ = 1

$$\text{Net margin} = 20 - 12 - 2 - 1 - 1 = 4 \geq 0$$

Therefore the notified tariff would be expected to meet the “no margin squeezing” obligation for this wholesale product.

Simplified illustration of test using the bitstream service

⁴ The required return on capital is obtained by multiplying the cost of capital by the capital employed.

$$\text{Net margin} = P_R - P_{W \text{ BSTREAM}} - C_{\text{opex}} - C_{\text{depn}} - C_{\text{capital}} \geq 0$$

Where:

P_R = Effective retail price of the Notifying Operator's relevant retail broadband service = 20

$P_{W \text{ BSTREAM}}$ = Effective wholesale price of the Notifying Operator's bitstream service = 10

C_{opex} = the Notifying Operator's additional downstream operating costs = 8

C_{depn} = the Notifying Operator's additional downstream depreciation = 3

C_{capital} = Required return on capital = 2

$$\text{Net margin} = 20 - 10 - 8 - 3 - 2 = -3 < 0$$

Therefore the notified tariff would be expected to fail the "no margin squeezing" obligation for bitstream, one of the wholesale products.

Example (2) – Leased lines – Under recommended analysis

A Notifying Operator wants to reduce the monthly rentals on its tariffs for national local leased circuit services (across all speeds).

Competitors who wish to offer an equivalent service can purchase two of the Notifying Operator's wholesale "customer access tails" ("CATs") in order to provide the same retail offering.

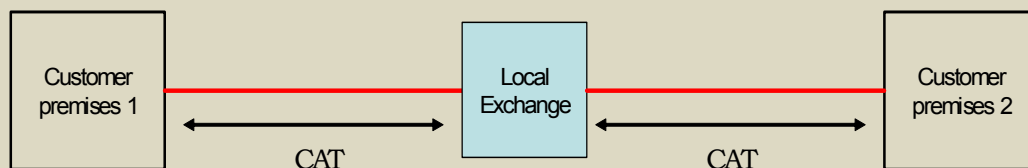


Figure 4: Scope of leased line wholesale services

Consequently, in order to confirm whether its new tariff complies with the "no margin squeezing" obligation, the Notifying Operator should calculate the margin achievable by an operator using two wholesale CATs in relation to each speed.

Simplified illustration of a test for an operator requiring full wholesale service provision (1 Mbps service):

$$\text{Net margin} = P_R - 2 \times P_{W \text{ CAT}} - C_{\text{opex}} - C_{\text{depn}} - C_{\text{capital}} \geq 0$$

Where:

P_R = Retail price of The Notifying Operator's relevant retail leased line service (for 1Mbps)= 595

$P_{W \text{ CAT}}$ = Wholesale price of the Notifying Operator's wholesale CAT service = 150

C_{opex} = The Notifying Operator's additional retail operating costs above the cost of the CATs = 75

C_{depn} = The Notifying Operator's additional downstream depreciation = 25

C_{capital} = Required cost of capital = 20

$$\text{Net margin} = 595 - (2 \times 150) - 75 - 25 - 20 = 175 \geq 0$$

Therefore the "no margin squeezing" obligation would be expected to be met for this specific speed, but this test would need to be repeated for other speeds as well.

3.5 Predatory pricing

Tariff obligation

69. The Regulation defines the no predatory pricing obligation as follows:

No predatory pricing: The Notifying Operator may not set a price for a Controlled Tariff such that, at the time of its introduction, the retail price could reasonably be expected to be unjustifiably below a relevant measure of the cost of providing the relevant Retail Telecommunications Service.

70. The price of a service may not be set below the cost of provision, where such price would weaken or drive out a rival or deter new entry into the market. Although initially consumers would face lower prices, in the long run prices could increase above the competitive level due to a lack of competitive pressure on the predatory company.

71. This obligation is included to ensure that existing rivals or potential rivals have an opportunity to maintain or establish their position and compete with the Notifying Operator. If predatory pricing occurs then existing and potentially future rivals would be unable to earn a sufficient return in the market and would therefore either leave or choose not to enter the market in the first place.

Recommended analysis

72. A predatory pricing analysis is mandatory when a margin squeeze analysis is not required, for instance where there is no related wholesale product offered or required by the Notifying Operator. Where a tariff passes a margin squeeze test, there is in principle no need to also perform a predatory pricing test as a tariff that passes the margin squeeze test is expected to be compliant with the no predatory pricing obligation.

73. If a wholesale input is provided by the vertically integrated Notifying Operator, at a regulated price to other non-integrated operators, enabling them to compete at the retail level, it should be sufficient for the tariff to be compliant with the “no margin squeezing” obligation. Under this configuration, if the tariff is compliant with the no margin squeezing obligation (i.e. retail prices allow the recovery of downstream costs, including retail costs), then as the regulated price of the wholesale input is expected to reflect the associated cost of provision, the tariff is expected to be compliant with the “no predatory pricing” obligation.

74. It is recommended that the analytical framework set out below is followed. Other approaches could be taken, although in such circumstances, the TRA may need to request further information before coming to a decision or may not be able to accept the analysis provided at all.

75. The Notifying Operator should provide the following, based on both “current year” data and the subsequent year’s data:
- Evidence to show that the tariff exceeds cost; or
 - If the tariff does not exceed cost, a written justification for this, with supporting evidence, in relation to:
 - a short-term demand or supply shock;
 - the existence of significant network effects – a new service therefore may be priced below cost in the short term in order to encourage uptake which benefits all users; or
 - the existence of dynamic effects - a new service therefore may be priced initially below cost in order to expand the scale of production and so achieve scale economies. This would lower costs which would then lead to prices being above cost.
76. In cases where the retail tariff is affected by a rebalancing plan and the price is equivalent to the ceiling price set under this plan, this will be considered a reasonable justification for the tariff apparently failing to meet this obligation.

Evidence that this obligation is met

77. If the Notifying Operator is following the recommended analysis, then they would need to show the following.
78. The notified tariff should not be such that the annualised (effective) price is below cost. This can be confirmed by calculating the differential between the (effective) price and cost for the current and subsequent year.
79. If this differential is negative, it is only permitted if it is due to a permissible pricing strategy as set out above in paragraph 0.

Example – Fixed line rental – under recommended analysis

A Notifying Operator wishes to reduce the price of a domestic fixed line rental from BD2 to BD1 per month.

Evidence is provided which shows that this is not in line with expected cost movements and therefore that the price will fall below current and subsequent year costs. No additional evidence is provided to justify the proposed tariff.

Therefore, in this case the tariff would be expected not to comply with the “no predatory pricing” obligation.

3.6 Abusive bundling (or tying) of services

Tariff obligation

80. The Regulation defines the no abusive bundling or tying obligation as follows:

No abusive bundling or tying: Where a bundle or tie includes at least one Retail Telecommunications Service in which the Notifying Operator has SMP, the Notifying Operator may not bundle or tie Retail Telecommunications Services Tariffs if it can reasonably be expected that as a consequence of the bundling or tying competition may be foreclosed, prevented, restricted or distorted. This could occur where: the terms on which the bundle or tie is offered are deemed anti-competitive or likely to be anti-competitive by TRA; or the components of the bundle or tie are not available separately; or the bundle or tie cannot be replicated by other operators.

81. Two types of bundles are generally identified: (a) pure bundles are those where the products can only be purchased in the form of a bundle; and (b) mixed bundles are those where the products are available both as a bundle and on a standalone basis.

82. A tie can be seen as a special form of bundle where the sale of one or several products (the “tied” product) is conditional upon the purchase of one or several products (the “tying” product(s)). Services may not be bundled in order to leverage market power from the market for one of the stand-alone products (normally the less competitive one) to the market for the other product (normally the more competitive one). Any bundle between a retail telecommunications service in which an operator has SMP and any other of their retail telecommunication services therefore falls within the tariff notification framework. However, the particular circumstances of any bundled offering will need to be considered to determine whether the existence of the bundle or the price of that bundle would lead to a material reduction in or foreclosure of competition. In certain circumstances bundling can provide clear benefits to consumers and increase overall welfare. There are an important feature of competition in the telecommunications sector.

83. Similarly, services may not be tied in order to leverage market power from the market for one of the stand-alone products to the market for the other product. Therefore, any situation where a service in which an operator has SMP is tied to another service in which the operator does not have SMP would be considered potentially problematic.⁵ This is due to the fact that the operator could be able to capture a large part of the market for the service for which it does not have SMP even though it may not be the most efficient provider of that service.

84. This rule is necessary in order to prevent an operator with SMP from abusing its position by foreclosing a retail market or materially hindering competition. This could be as a result of offering a particular bundle or tie or as a result of offering a bundle or tie at a price which has an exclusionary impact on the market.

⁵ A tie involving two services in which the Notifying Operator has SMP would also be considered potentially problematic.

Recommended analysis

85. As per the Regulation, a bundling/tying analysis is mandatory where two or more retail telecommunications services are being offered together and the Notifying Operator has SMP in respect of one or more of those services.
86. It is recommended that the analytical framework set out below is followed. Other approaches could be taken, although in such circumstances, TRA may need to request further information before coming to a decision or may not be able to accept the analysis provided at all.
87. The decision tree diagram below shows how the characteristics of the bundle (or tie) and its price determine whether or not it raises competition concerns.
88. As shown in the diagram, a bundle is not expected to raise anti-competitive concerns if:
- Either (as per “path (1)”):
- the bundle/tie can be replicated; and
 - it is not priced in a predatory manner.
- Or (as per “path (2)”):
- the bundle/tie is not replicable;
 - the products incorporated in the bundle are available on a stand-alone basis (i.e. the bundle is mixed) and it is not a de facto pure bundle (in the sense that the purchase of the standalone product(s) is attractive only to few consumers); and
 - the incremental prices of the products in the bundle are not below cost (this is to ensure that competition in the potentially competitive market is not prevented).

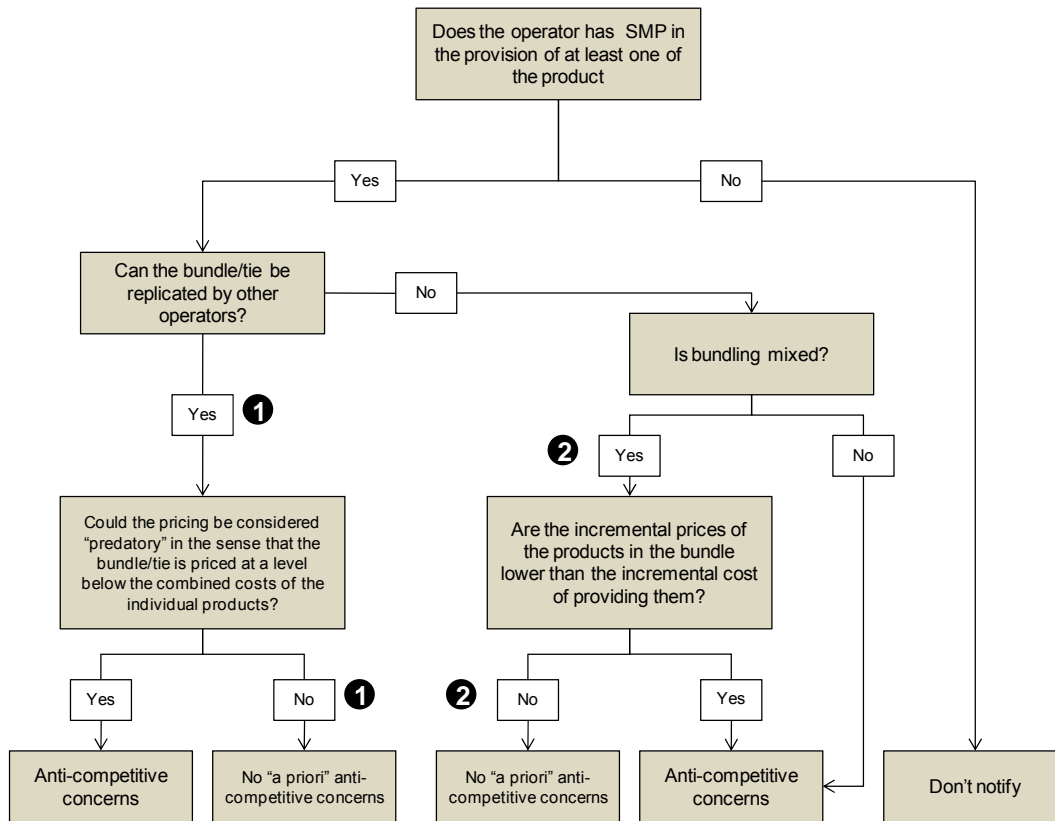


Figure 5: Decision tree – does a bundle give rise to competition concerns?

89. In order to demonstrate that a tariff for a bundle complies with the no abusive bundling obligation, an operator should provide sufficient evidence to support this conclusion. The types of evidence which are required for a notification by an operator that has SMP in one or more of the bundled services, are described below. As explained, there are two potential scenarios in which a bundle/tie is not expected to raise competition concerns.

Scenario 1⁶:

- **The bundle/tie can be replicated by other operators** – provide evidence to show that other operators currently offer the same bundle and/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 has SMP it may be necessary for a competitor to purchase a wholesale product or service offered by a Notifying Operator or another operator. In addition, when deciding if a bundle can be replicated it is important to consider 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 substitutes from a consumer’s perspective.

⁶ “Scenario 1” also applies to a notification by an operator offering a tie.

- **The bundle/tye has not been priced in a predatory fashion.** Depending on whether a wholesale product is available/required in relation to any of the components of the bundle, this could be assessed using a predatory pricing or a margin squeeze style imputation test:

Case (1): There is no wholesale product available/required for each component of the bundle.

- Provide evidence to show that the price of the bundle exceeds the combined cost of the components included in the bundle, based on both “current year” cost data and cost data for the subsequent year (i.e. use a predatory pricing test).

Case (2) There is a wholesale product available/required for any of the components of the bundle.

- Provide evidence to show that the price of the bundle exceeds the combined cost of the components included in the bundle. The cost of the component of the bundle for which an equivalent wholesale product exists (or is proposed), should be measured as the price of the wholesale input, as well as the additional operating costs, depreciation and the required return on capital as incurred by the integrated operator. This analysis should be based on both “current year” cost data and cost data for the subsequent year as well as for each available wholesale product (i.e. use a margin squeeze test).

In both cases:

- If the price of the bundle is lower than the combined cost of the services included in the bundle, then a justification of the pricing strategy should be provided (see paragraph 0 for more details of the permissible reasons).

Scenario 2:

- **The bundle cannot be replicated by other operators** – see above for more details on how the replicability of a bundle can be established.
- **The services can all be purchased separately and the bundle is therefore mixed⁷** – the notifying operator should provide information about the relevant services it offers and the services which are offered by its competitors. If the services are available in the market on a stand-alone basis as well as part of the bundle, then the bundle can be considered mixed.⁸
- **The incremental prices of the component products exceed their incremental costs**
 - Provide evidence to show that the “incremental price” of each product or service is higher than the cost of supplying that product or service both in the current and the subsequent year.
 - The “incremental price” is calculated as the difference between the price of the bundle and the stand-alone price(s) of all product(s) included in the bundle.⁹

⁷ And the bundle is not a de facto pure bundle / tying in the sense that the purchase of the standalone product(s) is attractive to only few consumers.

⁸ If the services can only be purchased in the form of a bundle then the bundle is considered “pure”.

⁹ The analysis may need to be adjusted when the bundle includes one or several products which are part of a re-balancing plan or similar arrangement.

90. If the bundle is expected to create efficiencies that otherwise would not exist, then these will be taken into account in the estimated costs of providing services.

Evidence that this obligation is met

91. If the Notifying Operator is following the recommended analysis, then they would need to show the following:

92. **Under Scenario 1:**

If the bundle / tie can be replicated, the notified tariff should not be such that the annualised effective price is below cost (measured directly or as the wholesale input price and additional downstream costs). The only exception is if this is part of a permissible pricing strategy as set out in paragraph 0.

93. **Under Scenario 2:**

If the bundle cannot be replicated and is mixed, the incremental prices of the component products / services of the bundle must not be lower than the costs of the components.

94. Any substantiated efficiency claims will be considered and, where appropriate, factored into the analysis.

Example – Broadband and mobile – under recommended analysis

A Notifying Operator wants to bundle together a residential post-paid mobile service and a standard domestic broadband package for “moderate users”.

Following the decision tree:

The operator has SMP in the provision of the broadband service.

The bundle can be replicated as wholesale broadband products are available and other mobile networks exist.

Predatory pricing test:

$$P_{\text{BUNDLE}} \geq \text{Combined cost} = C_{\text{MOBILE}} + C_{\text{BBAND}}$$

Where:

$$P_{\text{BUNDLE}} = \text{price of the bundle} = 50$$

$$C_{\text{MOBILE}} = \text{cost of provision of mobile service} = 10$$

$$C_{\text{BBAND}} = \text{wholesale price of broadband} + \text{additional operating costs, depreciation and required cost of capital associated with retail broadband provision} = 10 + 15 = 25$$

$$\text{➤ } P_{\text{BUNDLE}} = 50 \geq \text{Combined cost} = 10 + 25 = 35$$

Therefore the bundle is not expected to be anti-competitive and would be expected to comply with this obligation.

4 OTHER TARIFF ISSUES – SPECIAL INSTALLATION CHARGES FOR LEASED LINE SERVICES BASED ON COSTS

95. Since the installation charges for leased lines may be case-specific TRA does not require a Notifying Operator to notify every new installation charge. Instead the Notifying Operator should notify TRA its approach to setting charges, including the values of the standard parameters used to determine the charges for the installation of leased line services.
96. A Notifying Operator should subsequently notify any change to the agreed approach or to the standard installation rates.
97. In addition, when calculating an annualised overall price measure for a multi-part tariff which includes a variable installation charge, it is recommended that the Notifying Operator calculates an average rate across a representative sample of consumers and incorporate this in their measure.

5 MEASURING PRICES AND COSTS

98. This section provides further guidance on the measurement of prices and costs for the purpose of performing the proposed analysis to indicate that a tariff is compliant with the relevant tariff controls.

5.1 Prices

Multi-part tariffs

99. A multi-part tariff is a tariff made up of several components – for example an upfront charge, a monthly rental which may or may not include allowances (e.g. volume minutes and/or data) and a usage charge. A typical example is the tariff for a broadband service, which includes a connection/registration fee (i.e. a one-off element) and monthly rental fees (i.e. a recurrent element) as well as in some cases usage charges for downloads beyond the data allowance.
100. If an element of an existing multi-part tariff is being changed or a new multi-part tariff introduced, then a measure of the annualised effective consumer price incorporating all the elements of the tariff should be calculated and used to perform the proposed analysis. For example, this should incorporate (the exact components will depend on the specific tariff):
- an upfront fee (such as an installation fee) amortised over an appropriate period (e.g. the average “life” of the customer) which must be justified;
 - monthly rentals; and
 - average usage revenues/charges (based on expected/actual average levels of usage) and/or fixed usage revenues/charges (where charged at a flat rate).¹⁰
101. If the tariff will be in place for less than a year, then the effective tariff should be measured over the relevant implementation period.

Calculation of annualised effective prices

When calculating annualised effective prices the following should be provided in conjunction with the tariff Notification Form:

- detailed calculations showing how price terms have been annualised and combined;
- explanations of associated assumptions; and
- justification for amortisation bases used.

In addition, if a tariff is such that different rates are charged according to certain consumer characteristics, then each price term, as defined above, should be calculated

¹⁰ The monthly rentals and fixed usage charges may not be distinguishable – i.e. the monthly rental may incorporate a certain monthly usage allowance.

by taking a weighted average across the different rates. These averages should be weighted by the proportion of consumers who are expected to face each rate. For example:

$$\begin{aligned} & \text{Amortised installation fee A} \times \% \text{ of consumers expected to incur installation fee A} \\ & + \text{Amortised installation fee B} \times \% \text{ of consumers expected to incur installation fee A} \\ & = \text{Weighted average installation fee} \end{aligned}$$

5.2 Costs

102. The audited regulatory accounts constitute the basis for the costing information required to notify a tariff. Any departures, amendments and additions from the regulatory should be documented, justified and reconciled back to the regulatory accounts.
103. The cost of each component of the tariff shall be taken into account in calculating the total cost of providing the service or product.

Measures of Cost

104. Cost data provided should reflect the regulatory accounts, where available, with appropriate adjustments where necessary (any such adjustments must be documented and justified). The specific cost standards which are required are:

Long run incremental cost ("LRIC") / Long run average incremental cost ("LRAIC")

105. These cost measures indicate the incremental cost for a multi-product firm of providing a specific product or service. They therefore incorporate all operating and capital (or fixed) costs, but exclude any "joint" or "common" costs. The long-run average incremental cost (LRAIC) is the long-run incremental cost (LRIC) divided by total output of the relevant product or service. It is therefore a unit cost measure which is comparable to a unit price.

Long run average incremental cost + ("LRAIC+")

106. 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. 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 LRAIC would not allow an efficient operator to break even, as those common costs would not be recovered. A fully-allocated cost measure ensures that common costs are taken into account.
107. Normally, LRAIC+ is calculated by allocating joint and common costs on the basis of the relative size of their LRAICs (this is usually referred to as "LRAIC+EPMU", where EPMU stands for equi-proportional mark-up). However, other allocation bases (e.g. revenue) may be employed where appropriate.

108. If a full LRIC costing system is not available, other methods of cost allocation could be used as a reasonable proxy. For example, fully-allocated costing (FAC) techniques could be used to calculate the costs associated with a specific product or service.
109. However, without a proper proxy for LRAIC, it may not be possible to determine the outcome of some of the tests. For example, if a price is below cost measured on an FAC basis, this is unlikely to contravene the no predatory pricing obligation. Any Notifying Operator is however encouraged to provide incremental cost measures for the relevant tests where feasible. Table 1 below indicates the recommended cost standard required to carry out each of the tariff notification tests.

| COST STANDARD | LRAIC | LRAIC + | LRAIC (wholesale input price + downstream costs¹¹) |
|----------------------|--------------|----------------|--|
| TEST | | | |
| Price discrimination | ✓** | | |
| Excessive pricing | | ✓*** | |
| Margin squeezing | | | ✓* |
| Predatory pricing | ✓* | | |
| Abusive bundling | ✓* | | (✓*) |

Table 1: Recommended Test - cost standard matrix

* In relation to these tests, the use of an FAC measure is permissible, providing there is no reason to believe that LRAIC will exceed FAC.

** In relation to the price discrimination test, LRAIC + EPMU or FAC (with EPMU) is permissible as the result of the price-cost ratios could be expected to be equivalent.

*** In relation to the excessive pricing test, the use of an FAC measure is permissible instead of LRAIC+.

Cost forecasting

110. TRA expects that the most recent regulatory accounts will form the basis for “current year” costs although adjustments may be appropriate if material changes to costs are expected between the period covered by regulatory accounts and the “current year”. Any changes should be documented and justified.
111. The Notifying Operator is advised to provide forecasts of costs the subsequent year (i.e. the year following the “current year”) and use this data to perform the

¹¹ Equivalent to wholesale input price + opex + depreciation + required return on capital.

relevant tests. Forecasts should ideally be based upon the most recent regulatory accounts, where available, after adjustments, where necessary. Appropriate justification must be provided for any adjustments made. For example, this may include information on equipment price trends, vendor offers that indicate future prices and/or discounts, information on trends in other retail costs, and any internal business planning documentation. Note that any forecasted estimate should reflect the level of demand that you have forecasted.

Potential adjustments to cost estimates

112. As explained, cost data used to perform the tests outlined in these guidelines should be based upon a Notifying Operator's most recent separated regulatory accounts, where available. Where further separation of financial data across various retail services and products provided is used, the basis for such allocations should be explained and backed up with detailed calculations.
113. In addition, further adjustments to the accounting based costs and capital employed may be considered necessary if such adjustments are expected to have a material impact on the costs associated with the relevant product or service. This relates predominantly to instances where certain types of costs (e.g. marketing and advertising) are incurred in one year but the benefit of these costs is obtained over time. From an accounting perspective, these costs may not normally be capitalised, but, where these costs are significant it may be appropriate to capitalise them and amortise them over an appropriate period (i.e. a period longer than the accounting period).
114. These adjustments could involve restating certain costs so that they are spread over time. In relation to each adjustment, the amortisation method should be explained and justified. Some potential adjustments which could be made (and proposed amortisation bases) include:
 - capitalising customer acquisition costs – *amortised over the average contract length (e.g. 2 years)*; and
 - capitalising handset subsidies (or subsidies for other customer equipment) – *amortised over the average expected period of use of handset / equipment*.
115. These adjustments can be expected to bring reported costs more in line with economic costs.¹²

Sensitivity analysis

116. The Notifying Operator is advised to perform some degree of sensitivity analysis on its cost, effective tariff and forecast demand estimates, in particular where the results of the quantitative analysis submitted are not fully conclusive. This would assist TRA in determining how reasonable and robust the analysis undertaken is. Such sensitivity analysis could involve identifying those assumptions which are

¹² In order to estimate the annual costs incurred in any one year, it may be necessary to consider the costs incurred prior to that year which, when spread over time, could impact the year under consideration.

most likely to affect the estimates generated. If, for example, those assumptions were each increased or decreased by 5% or 10%, by how much would the resulting estimate change? Is this change significant? Would the outcome of the tests performed be likely to change?

117. Some summary statistics showing the outcome of the sensitivity testing and a description of the reliability of the cost and tariff estimates would therefore be recommended. In addition, an indication should be given of the impact this would have on the results of the retail tariff notification tests.