The Hashemite Kingdom of Jordan

TELECOMMUNICATIONS REGULATORY COMMISSION

Public Consultation Document

Implementation of a Margin Squeeze Test for local access and broadband access

08 August 2024

1 Introduction

The Telecommunications Regulatory Commission ("TRC") is responsible for promoting competition in Jordan's telecommunications and information technology sectors. Article (6) of the Telecommunications Law No. 13 of 1995 (The "Law") requires the TRC to, among other duties, ensure that it imposes regulation on markets in the telecommunications sector sufficient to forbid illegal competitive practices or prevent any person with a dominant position in the market from abusing its position and to take any necessary actions in this regard.

In line with this directive, the TRC undertook a market review and designated Orange Fixed and Orange Data (hereafter "Orange") as a dominant operator in the markets for[1]:

- Wholesale Local Access (WLA)
- Wholesale Broadband Access (WBA)
- Retail market for fixed telephony access and call origination (FACO)

As a result of this dominance designation, and amongst other obligations, the TRC requires Orange to provide access to the relevant wholesale services at prices that do not cause a margin squeeze ("MSQ"):

- **At the wholesale level**: Considering the margin between WLA services and WBA services; and,
- **At the retail level**: Considering the margin between Orange's retail offers in relevant downstream markets and the wholesale services used to provide the retail products included in the offers.

Furthering its directives in the Law and the Fixed Market Review decision, the TRC has developed a margin squeeze tool ("MSQT") to ensure Orange, as the regulated operator, complies with the above obligations. TRC should use this tool to assess the wholesale and retail prices of the regulated operator to prevent MSQ from being in the market. By relying on this tool, TRC aims to promote fairness, transparency, and adherence to the rules, ultimately benefiting both competition and consumers in the telecoms market.

To ensure transparency, the TRC is undertaking this public Consultation process[2] to invite the Licensees and other relevant stakeholders to comment on the principles for designing the margin squeeze tests (MSQT), as described below.

[1] Regulatory Decision on the Fixed Markets Review, decision No. (14-12/2020) dated (30/9/2020) ("2020 Fixed Markets Review"), pg. 7.

[2] The "Consultation" hereafter.

2 Objectives and scope of this consultation process

In this document, the TRC consults on those principles that it will apply to assess whether the regulated operator is complying with its obligation not to engage in MSQ.

The implementation of an ex-ante MSQ regulation does not prevent TRC from investigating and punishing MSQ abuses on an ex-post investigation, in line with the Competition Safeguards Instructions[3].

The objective of the ex-ante MSQT presented in this consultation is to reduce the risk that the vertically integrated SMP operator incurs in an MSQ. However, it does not eliminate this risk entirely.

Also, the approach to assess MSQ may differ between an ex-ante control and an ex-post investigation. Ex-post, the MSQT focuses on assessing whether the vertically integrated operator has set wholesale and retail prices in the past in a way that has led to insufficient margins for its downstream competitors. The ex-ante MSQT takes a broader perspective than this by also considering broader regulatory objectives, such as promoting competition in the long run.

Therefore, the usual ex-post competition procedures will apply if there is an allegation that the regulated operator has engaged in an MSQ.

2.1 Scope of the MSQT

TRC proposes to implement two types of MSQT:

- **A wholesale MSQT**, including the assessing of the margin between WBA fibre products and Virtual unbundled local access services (“VULA”).
- **A retail MSQT**, including assessing the margin between the regulated operator’s retail broadband products and relevant WLA and WBA services, as:
  - VULA in the WLA market[4].
  - Bitstream copper and fibre services in the WBA market.

These tests and, therefore, whether the regulated operator is complying with its obligation not to engage in an MSQ for the given markets will be assessed according to the principles discussed in this Consultation. That is, these principles will guide the design of the MSQT that the TRC will use to assess the regulated operator's retail and wholesale offers.

[3] Currently under review by the TRC.

[4] LLU is not considered for the same reason why the wholesale MSQT is focused on WLA fibre services.

2.2 Implementation of the MSQT

The TRC will implement the MSQT using an Excel model specifically developed for that purpose, using information from the regulated operator. There will be two types of information that will be requested:

- Information related to the offers being assessed under the MSQT, such as prices, discounts, volumes, etc. This information will be provided by the regulated operator before launching broadband offers in the market. The TRC will provide a form with the specific information required.
- Historic cost and volume information in the format specified by the TRC.

In the scenario where the regulated operator fails to provide the necessary information to run the MSQT, the TRC may resort to using alternative sources to ensure the test is conducted with the best available information.

Beyond the dimensions discussed in this Consultation, the MSQT is based on a number of technical assumptions that the TRC will set and discuss with the regulated operator.

The implementation of the MSQT does not replace any existing obligations currently imposed on the regulated operator.

Section 2.3 describes the Public Consultation process. Section 3 introduces the definition of MSQ. Section 4 discusses the dimensions of the MSQT, including the TRC's proposal. Section 5 summarises the proposed implementation approach for the retail and wholesale MSQT. Finally, section 6 includes the list of questions for stakeholders.

2.3 The Public Consultation Process

This Public Consultation Document will be available on the TRC's website at: [www.TRC.gov.jo]

Following the publication of this Public Consultation document, interested parties are invited to provide comments and observations to the TRC within 30 working days of the publication date.

Any comments provided in response to this Public Consultation Document should be provided in hard copy to TRC and soft copy (both in PDF and Word format) to the following E-mail to: marketreview@TRC.GOV.JO

The TRC invites comments on this Consultation from all interested parties. The TRC encourages respondents to support all comments with relevant arguments and, if relevant, data, analysis, benchmarking studies, and information based on the national situation or the experience of other countries. Indeed, it may give greater weight to comments supported by such evidence.

The TRC has prepared specific questions for respondents to address if they wish. In providing comments, respondents should indicate the question number to which their comments relate. In addition to responding to these questions, the respondents may comment on any other aspect of the Consultation. In doing so, respondents should indicate the particular section of the Consultation to which their comment refers.

The TRC also appreciates that some of the issues raised in the Public Consultation document might require respondents to provide confidential information supporting their comments. Respondents are therefore requested to identify any such confidential material and include it in a separate annex to their response.

Following the deadline for receiving comments, the TRC will post all parties' comments on its website, subject to confidentiality considerations. Interested parties will have an additional 10 days to provide input on any issues raised in other parties' comments.

The TRC is under no obligation to adopt the comments of any respondent.

The TRC will complete this Consultation process by publishing a Position Statement, which will set out the TRC's response to the more substantive comments identified across the Consultation responses and the final principles it will apply for the MSQTs.

3 Definition of margin squeeze

MSQ occurs when a vertically integrated operator that supplies key wholesale (upstream) services to rival firms competing in a related downstream market sets the upstream prices and downstream prices[5] in a way that renders the activities of its competitors in the downstream market unprofitable. That is to say, an MSQ occurs when the difference between downstream and upstream prices is insufficient to enable a downstream rival to recover the downstream costs necessary to provide the downstream services.

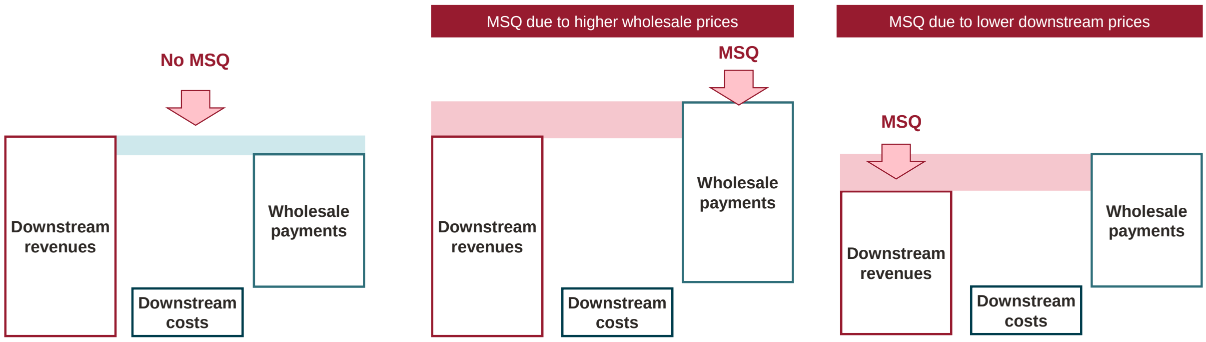
An MSQ can occur:

- Either because the price for the wholesale service set by the vertically integrated operator is too high;
- Because the downstream price is too low; or,
- Because of a combination of both of these factors.

This is presented graphically in Figure 1 below.

[5] MSQ can take place at different levels of the value chain. For example, between retail broadband and WLA products or between two wholesale products, such as VULA and Bitstream-fibre.

Figure 1 Types of MSQ

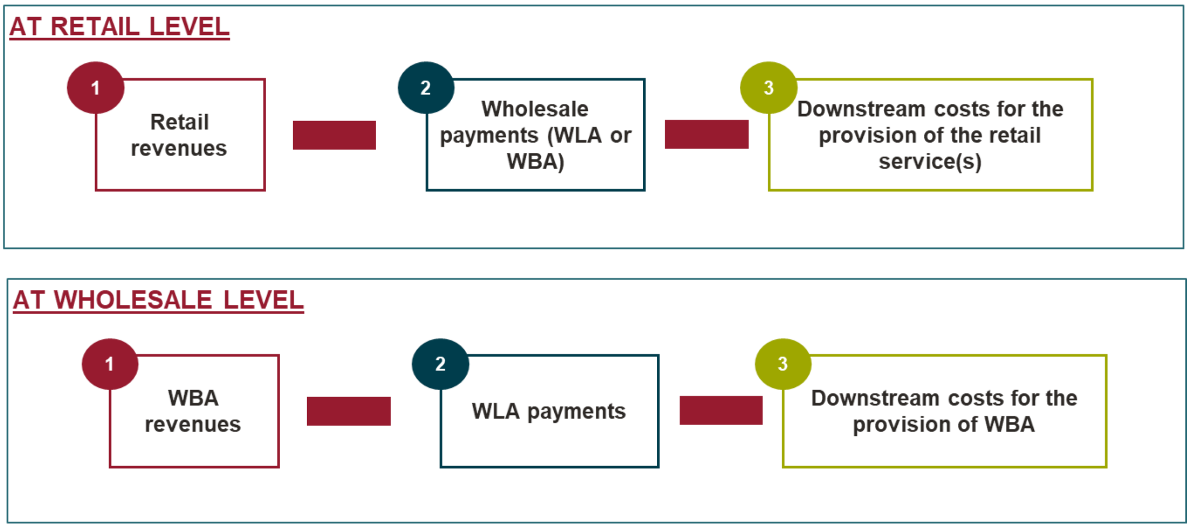


Source: TRC

As shown in Figure 2, the MSQT under consultation is designed to ensure that:

- The regulated operator's retail tariffs do not create an MSQ for each relevant wholesale service.
- The regulated operator's WBA tariffs do not create an MSQ for the VULA service.

Figure 2 The MSQT under consultation



Source: TRC

As discussed in section 2.1, it is important to distinguish between ex-post MSQ investigations and ex-ante MSQ controls, as they serve different purposes. Ex-ante controls are preventive and may consider broader regulatory goals. At the same time, ex-post investigations are corrective and just aim to assess whether MSQ has indeed taken place in a market.

4 Dimensions of the MSQT

The design of the MSQT requires specifying several dimensions. These dimensions constitute the basis on which the offers will be assessed, and are related to the following:

- Efficiency level
- Timeframe
- Level of aggregation
- Profitability method
- Cost standard
- Wholesale services considered
- Assessment of bundles
- Consideration of promotions
- Treatment for non-residential offers

Below, the TRC discusses its proposal on each of these aspects.

4.1 Efficiency Level

In applying the MSQT, an assumption must be made about the level of efficiency assumed when including the costs of the activities "downstream" of the wholesale service (which can include network and non-network costs).

There are three main options to consider:

- <u>Equally efficient operator (EEO).</u> In this case, the "downstream" costs used in the test are those of the regulated operator. Therefore, the test assumes that the alternative operators have the same scale and efficiency as the SMP operator. In practice, considering an EEO approach would mean that the data of the regulated operator will be used as the starting point of the MSQT.
- <u>Adjusted equally efficient operator (adjusted EEO).</u> Under this approach, the downstream costs of the regulated company are adjusted to account for potential differences in scale[6] or other factors, such as a different cost of capital or average consumer life. As with the EEO standard, the model uses cost information from the regulated operator, but adjustments are made.
- <u>Reasonably efficient operator (REO).</u> In this case, the downstream costs are not those of the regulated company but those considered to be incurred by an efficient competitor. This approach requires using cost data from alternative operators.

[6] Similarly efficient operator ("SEO") refers to the specific case when only scale adjustments are considered.

The choice of which option to apply is subject to trade-offs and generally depends on the competitive context of the market in question.

An EEO approach prioritises static efficiency. In contrast, adjusted EEO and REO can be used as transitory measures to facilitate market entry, possibly at the expense of higher end-user prices in the short run.

In particular, the TRC considers there are two scenarios where it might be appropriate to deviate from the EEO standard[7]:

1. When market entry or expansion has been frustrated in the past, and secondly,
2. In markets where alternative operators have low volumes and significantly limited geographic reach compared to the SMP operator. This is because the significant differences in scale may indicate that economic conditions do not enable the alternative operators to acquire scale.

Table 1 shows the market share ratios of the main operators in Jordan compared to Orange, the largest operator.

Table 1 Ratios comparing market shares

✂✂

Source: Own calculations from TRC data.

Table 1 shows that Umniah's national-level market share is ✂ of Orange's market share at a national level. Outside Amman, Umniah's share is up to ✂ of that of Orange.

National market shares in the retail Fixed Access and Call Origination (FACO) market are slightly more asymmetric than in the retail fixed broadband services market, but the overall market structure is very similar. In 2023, Umniah's market share was ✂ of Orange's national share.

In Jordan, wholesale broadband services (WLA or WBA) take-up is still limited but increasing due to the higher presence of Fiber Tech. Of the retail broadband lines in service in the fourth

[7] BEREC Guidance on the regulatory accounting approach to the economic replicability test. https://www.berec.europa.eu/sites/default/files/files/document_register_store/2014/12/BoR_%2814%29_190_BEREC_RA_Guidance_on_ex-ante_margin_squeeze_tests_2014-12-05_f.pdf

quarter of 2023 provided by alternative operators, ✂[8] were provided through Orange's wholesale copper services. Orange has not yet provided wholesale fibre services to its retail competitors. The main operator providing wholesale fibre services is Fiber Tech, whose services represent ✂[9] of the total retail fibre broadband lines in the market. Orange's market share in the wholesale broadband market is similar to its retail market share, around ✂.

Considering the market dynamics in Jordan, there is no evident reason to depart from an EEO approach. Here are the key points supporting this:

1. Over the past two years, Zain, the third operator, has expanded its market share, enabling it to benefit from scale economies. And Umniah already has a market share above ✂ in the retail broadband market.
2. Evidence suggests that operators can reach customers across various geographic areas in Jordan. For instance, as explained above, Umniah's market share outside Amman is comparable to Orange's.
3. Most operators self-provide WLA/WBA services. Hence, retail market shares are a good indication of the wholesale market dynamics.

Therefore, TRC considers that the retail and wholesale MSQT should be based on an EEO approach. This means the retail and wholesale MSQT will be based solely on the regulated operator's information without implementing any adjustments.

Question 1: efficiency level for the retail MSQT

Do you agree with TRC's preliminary conclusion that an EEO approach should be considered for estimating downstream costs in the retail MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 2: efficiency level of the wholesale MSQT

Do you agree with TRC's preliminary conclusion to consider an EEO approach for estimating downstream costs in the wholesale MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.2 Timing

The MSQT can be applied ex ante to offers before their launch or ex post once they are in the market. It is also possible to consider a combination of the two, that is, to combine an ex ante test and regular ex post assessment.

The decision on which approach to apply depends on several factors, including the degree of competition in the market. For example, the risk of applying only an ex-post test can be high

[8] Based on TRC information on the number of Fixed Broadband subscriptions in the third quarter of 2023.

[9] In the fourth quarter of 2023, Fiber Tech supplied ✂wholesale fibre broadband lines over a total of ✂retail fibre (total) lines in the market.

in markets where upstream wholesale products are nascent and retail competition is just beginning to emerge. In this instance, the risk of the regulated operator engaging in anti-competitive behaviour is relatively high. In contrast, any delay in resolving that behaviour could be significantly detrimental to competition emerging.

It is also important to consider the regulatory context. The ex-ante MSQT becomes a particularly relevant tool in markets where tariffs from the regulated operator need to be authorised before their launch, as in Jordan. Applying the ex-ante MSQT limits the risk that authorised offers results in MSQ.

However, in dynamic markets where operators launch new offers at a high frequency, applying the MSQT every time a new offer is launched may not be feasible or desirable. This is both because it will create a high burden and because it may limit the dynamism of the market. An intermediate option in this case is to assess, ex- ante, only a limited number of offers, focusing on those that are likely to have a significant impact on the market. These offers are known as "flagship" offers[10].

4.2.1 Proposed timing for the retail MSQT

Given the limited take-up of wholesale services in Jordan and the TRC's pre-authorisation of Orange's retail tariffs, TRC sees merit in applying the MSQT ex-ante.

Because fibre broadband services are more dynamic than copper-based services, the TRC proposes to analyse ex-ante, only fibre offers classified as flagship. The approach the TRC proposes to use to identify flagship fibre offers is detailed at the end of this section.

The TRC proposes to complement the ex-ante assessment of retail offers with an ex-post review every six months. This is for the following reasons:

- First, the ex-ante assessment of new offers relies on forecasts, which may be based on historical information from existing offers or new information the regulated operator provides. The ex-post assessment allows the MSQT to be updated with actual information from the offer.
- Second, the ex-ante assessment of individual offers is usually undertaken considering only the incremental costs the operator incurs to provide the offer. This allows the regulated operator to recover the costs shared across different offers flexibly. However, it does not ensure the regulated operator is recovering all the costs incurred, because incremental costs of individual offers do not include the costs shared across different offers.

  This risk is avoided by complementing the individual ex-ante MSQT with an ex-post MSQT, the latter applying a higher level of aggregation and including the costs shared across offers.

10 See, for example, "BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex-ante/sector specific margin squeeze tests)", BoR (14) 190. Section 2.4.1.

Therefore, TRC proposes to apply:

- An ex-ante MSQT whenever:
  - A new retail offer is launched (If the broadband service is fiber-based, only flagship offers will be considered), or
  - An existing retail offer is changed (If the broadband service is fiber-based, only flagship offers will be considered).

  For avoidance of doubt all new or amended copper based broadband offers will be annalyzied.

- An ex-post MSQT:
  - Every six months
  - If there is a change in the relevant wholesale tariffs.

Approach to identifying fibre broadband flagship offers

"Flagship offers" refer to products or services provided by a communications operator that, according to certain criteria, play a central role in the market and are considered the most commercially attractive products[11]. Regulators usually identify them based on the revenues associated with the subscriber base of the offer.

The identification of flagship offers from an ex-ante viewpoint, that is, before an offer has been launched, presents the challenge that there is no information on its actual revenues or subscribers. Given this, TRC proposes to identify fibre flagship offers following the steps below:

1. Identify existing flagship offers from the regulated operator based on existing subscribers and revenues. Existing flagship offers will be the ones that cumulatively account for at least 75% of the operator's[12] customer base or revenues
2. A new offer launched by the regulated operator will be considered flagship if:
   a. It is a variation of an existing flagship offer, such as an offer that includes an add-on (for example, access to certain streaming content) or,
   b. The offer has the potential to exert a significant impact on the market, based on, but not limited to:
      i. The customer segment targeted by the offer.
      ii. The services included.
      iii. The retail distribution channel through which the offer is available, and,
      iv. Any other element which indicates the offer may exert a significant impact on the market.

[11] The concept of using margin squeeze tests for flagship products was originally proposed by the European Commission (2013) in connection with wholesale pricing for NGA. See BoR (14) 190, section 2.4.1.

[12] 75% is in line with the international experience. In Spain, the CNMC threshold to define a flagship offer is 80%, as per CNMC's decision: RESOLUCIÓN POR LA QUE SE APRUEBA LA METODOLOGÍA PARA LA DETERMINACIÓN DEL TEST DE REPLICABILIDAD ECONÓMICA DE LOS PRODUCTOS DE BANDA ANCHA DE TELEFÓNICA COMERCIALIZADOS EN EL SEGMENTO RESIDENCIAL Y SE ACUERDA SU NOTIFICACIÓN A LA COMISIÓN EUROPEA Y AL ORGANISMO DE REGULADORES EUROPEOS DE COMUNICACIONES ELECTRÓNICAS. OFMIN/DTSA/004/16/TEST DE REPLICABILIDAD ECONÓMICA RESIDENCIAL. 6 de marzo de 2018.

4.2.2 Proposed timing for the wholesale MSQT

Given that reference offers are not updated frequently, the TRC proposes to implement the wholesale MSQT ex- ante, whenever:

- A new wholesale reference offer is planned to be introduced,
- The prices and / or conditions of the services included in the reference offer are updated, and
- When TRC considers it appropriate, for example, based on changes in the market or the availability of new information.

Question 3: timing of the retail MSQT

Do you agree with TRC's preliminary conclusion that the retail MSQT should be applied on an ex-ante basis, complemented with an ex-post MSQT every six months? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 4: criteria to identify retail fibre flagship offers

Do you agree with TRC's preliminary conclusion on the criteria proposed to identify retailflagship offers? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 5: timing of the wholesale MSQT

Do you agree with TRC's preliminary conclusion that the wholesale MSQT should be applied on an ex-ante basis? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.3 Level of aggregation

The MSQT can be implemented at different levels of aggregation:

1. Offer by offer: ensuring that each individual offer can be replicated by alternative competitors.
2. At a product level: examining separately the groupings of different products offered by the regulated company, e.g., broadband access offers only, broadband and voice access packages, etc.

In Norway, NKOM established 70% of the revenues as a threshold, as per NKOM decision on the "Principles for the use of margin squeeze tests for local access to Telenor's fibre access network in Market 3a (VULA fibre)", Annex 9. 23 August 2021.

3. At the product portfolio level: covering the entire product portfolio of the regulated company or a subset of the offers. This approach grants a higher level of flexibility to the regulated company for the recovery of common costs across different offers/services.

As per the previous dimensions, the selection of an appropriate level of aggregation depends on the specific characteristics of the market and the regulatory framework.

4.3.1 Proposed level of aggregation for the retail MSQT

TRC will apply an ex-ante retail MSQT to the individual fixed broadband offers of the regulated operator before they are launched into the market. However, for the reasons stated in Section 4.2.1, only flagship offers will be assessed in the case of fibre broadband services.

This approach aligns with the current authorisation process that TRC follows for Orange's broadband offers and ensures that alternative operators can replicate the broadband offers launched into the market.

TRC proposes to consider a higher level of aggregation for the ex-post MSQT. In this case, TRC will use a portfolio approach, aggregating the offers that have been analysed ex—ante and including up-to-date information on users and traffic volumes. This more aggregated ex-post control ensures that:

- The MSQT considers actual information from the offers, and
- The regulated operator is able to recoup the costs that are shared across offers.

4.3.2 Proposed level of aggregation for the wholesale MSQT

TRC will implement the MSQT for each individual WBA service[13] included in the reference offer for fibre services. This will ensure that alternative operators can replicate, using the VULA service, all WBA services included in the regulated reference offer.

[13] This means that the test will be conducted at the different speeds stipulated in the reference offer.

Question 6: level of aggregation of the retail ex-ante MSQT

Do you agree with TRC's preliminary conclusion to apply the ex-ante MSQT at the level of individual offers? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 7: level of aggregation of the retail ex-post MSQT

Do you agree with TRC's preliminary conclusion that the ex-post MSQT should be applied at the portfolio level? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 8: level of aggregation of the wholesale MSQT

Do you agree with TRC's preliminary conclusion that an offer-by-offer approach is the appropriate level of aggregation to be considered in the wholesale MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.4 Profitability method and time horizon for the test

There are two main approaches to assessing the profitability of offers:

1. Period-by-period. This approach compares revenues and costs as they arise for the selected period. This means that non-recurring costs and revenues will be included in the margin squeeze calculation for the year of payment or receipt. To do this, assumptions must be made about how capital costs (depreciation and return on investment) are distributed over time.
2. Net Present Value (NPV) [14]. Calculates the discounted cash flow of revenues and costs (valuing wholesale services according to their price) over a given period of time. The capital costs included in this case are those necessary to provide the service and incurred during the time period under consideration.

Each of these approaches has its advantages and disadvantages. The disadvantage of the period-by-period approach is that the outcome is determined by how capital is distributed/recovered over time. Usually, this is based on the operator's accounting data. Its advantage, however, is that this test is very easy to apply, especially on an ex-post basis.

However, in industries such as the telecommunications sector, where significant initial investments are required, period-by-period testing might not be the most appropriate to evaluate if an operator is incurring an MSQ.

[14] There is a third alternative, cohort analysis, similar to the NPV analysis, although the time period is determined by the average life of the client.

The NPV approach avoids the disadvantage of the period-by-period approach. With this method, costs and revenues are appropriately allocated according to their economic life over time and are not accounted for when they are incurred.

Under both approaches, it is also necessary to specify the time period that will be considered in the assessment. The time horizon is relevant to determine the period over which costs and revenues will be assessed and also for recovering any fixed costs incurred by the operator in providing the relevant service(s) assessed.

In a margin squeeze context, the relevant return or margin is typically identified indirectly through a Weighted Average Cost of Capital (WACC) approach for the downstream business. The WACC reflects the opportunity cost of capital invested in the business, ensuring an appropriate return on investment. This rate should ensure that the margin between the retail revenues and the wholesale costs is large enough that an efficient alternative provider can achieve an adequate return on invested capital.

4.4.1 Proposed profitability method for the Retail MSQT

TRC believes the NPV approach is more suitable for the retail MSQT. This method is aligned with how operators make their business decisions and is less dependent on how operators' accounting data allocate capital costs over time.

Within this, the TRC proposes to base the time horizon for the MSQT (i.e., the number of years the NPV analysis needs to consider) on the average customer lifetime for broadband services.

TRC proposes that an alternative operator should be able to earn a reasonable profit on its downstream operations. The WACC is considered to be the latest approved, at 11.9%.

4.4.2 Proposed profitability method for the Wholesale MSQT

For similar reasons to those stated for the retail MSQT, TRC proposes to adopt an NPV approach for assessing WBA services, considering a time horizon based on the average customer lifetime and a reasonable rate of profit on downstream costs.

Question 9: profitability method for the retail and wholesale MSQT.

Do you agree with TRC's preliminary conclusion that an NPV approach should be used in the retail and wholesale MSQT for broadband offers? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 10: time horizon for the retail and wholesale MSQT.

Do you agree with TRC's preliminary conclusion that the retail and wholesale MSQT should use the average customer lifetime for the time horizon? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 11: reasonable profit for the retail and wholesale MSQT

Do you agree with TRC's preliminary conclusion that the reasonable rate of profit should consider the approved WACC rate? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.5 Cost standard

There are several cost standards that can be considered when applying the MSQT and calculating the relevant downstream costs:

- *Average Avoidable Costs* (AAC). These are the costs that would be avoided in the short term if a certain product (for example, a commercial offer) ceased to be provided. This concept, therefore, does not include sunk fixed costs or costs shared with other increments (e.g. shared with other commercial offers).
- *Long Run Incremental Costs* (LRIC). In contrast to AAC, this measure of cost includes fixed and sunk costs but not costs shared between increments/services (such as general IT and overhead costs, for instance).
- *LRIC+.* This builds on the LRIC approach but also includes an allocation of shared costs.
- *Fully Allocated Cost* (FAC). Rather than being an economic measure of costs, this is an accounting concept that distributes all the company's costs, including all shared and common costs, among the different services. As both LRIC+ and FAC attribute total costs to services, these approaches may generate relatively similar results.

The suitability of each cost standard will depend on the following key dimensions:

- *Level of aggregation:* In an offer-by-offer assessment, many downstream costs will be shared between offers. These costs would not be included in a measure of incremental costs or avoidable costs[15]. If the test is done for all broadband products, that is, a portfolio approach, there will be many shared costs between offers that would be incremental or

[15] For example, the costs of the billing system are shared between the different commercial offers.

avoidable for all broadband products (for example, the costs of an advertising campaign to promote Internet access). In this case, a FAC or an LRIC+ approach are more appropriate[16].

- *State of competition:* The ACC approach fits best when the objective is to “protect” the established competitors. The LRIC approach is best suited to foster entry by ensuring the possibility of recouping fixed costs.
- *Information available:* If LRIC cost estimates are not available, fully distributed cost estimates can be used, as such cost estimates are more typically available

The EC[17] and regulators in different jurisdictions[18] have opted for the LRIC and LRIC+ methodologies to implement MSQT. The EC favours the LRIC+ approach as it encourages efficient network investment, ensuring the operator recoups costs.

4.5.1 Proposed cost standard for the retail MSQT

The MSQT considers network and non-network cost information.

- **For network costs.** TRC proposes using the costs from the TSLRIC+ hyprid model developed by the TRC.
- **Non-network costs** will be based on the data submitted by the regulated operator. [19]

The specific cost categories considered in the ex-ante and ex-post MSQT differ.

- **The ex-ante MSQT** excludes cost categories which are not incremental to the provision of individual offers and are shared across several offers. For example, general advertising costs.
- **The ex-post retail MSQT** will consider the incremental costs of providing the analysed portfolio of offers. Given the higher level of aggregation of this test, some cost categories excluded in the individual ex-ante MSQT[20] become incremental when evaluating a portfolio of offers. For example, advertising costs are needed to compete at the retail level. And,

[16] Not including shared costs in a test may mean penalising operators that do not enjoy economies of scope. For example, if the regulated company shares IT and billing systems between voice and Internet services, the use of incremental costs would not include any of these costs. This could harm an operator that only provides Internet access products since, for this operator, the IT and billing systems are incremental to the Internet service.

[17] The EC recommendation of 11.9.2013 provides the following guidance “*The incremental cost of providing the relevant downstream service is the appropriate standard. A LRIC+ model should be used to calculate the incremental cost (including sunk costs) and to add a markup for common costs related to the downstream activities*”. https://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2013/c_2013_5761_en.pdf

[18] In Ireland, ComReg opted for the LRAIC+ approach to determine the costs for the provision of FTTH-based VUA in the WLA market and for FTTC-based Bitstream. In Norway, NKOM adopted the LRIC+ to assume that all costs are covered. The IFT in Mexico also chose an LRIC+ approach, given the cost structure of different market segments and the need to break down common costs.

[19] The TRC will send an information request to the regulated operator detailing the cost information needed to run the MSQT.

[20] Cost shared across offers.

therefore, incremental to the provision of the service. The TRC proposes including these cost categories in the ex-post retail MSQT.

4.5.2 Proposed cost standard for the wholesale MSQT

In line with the approach for the retail MSQT:

- **For networks costs**, TRC proposes using LRIC+ costs from the TSLRIC+ hyprid model.
- **Non-network costs** will be estimated using information from the regulated operator's based on the data that submitted by the regulated operator.

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Question 12: cost standard for the ex-ante retail MSQT

Do you agree with TRC's proposed approach estimating the costs to be used in the ex-ante retail MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 13: cost standard for the ex-post retail MSQT

Do you agree with TRC's proposed approach for estimating the costs to be used for the ex-post retail MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 14: cost standard for the wholesale MSQT

Do you agree with TRC's in the proposed approach for estimating the costs to be used in the ex-ante wholesale MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.6 Relevant regulated wholesale services

In certain cases, alternative operators can use more than one wholesale product to compete against a regulated company's retail product. For example, alternative operators can provide retail broadband services in Jordan using WLA or WBA services.

The MSQT could calculate a weighted average cost of wholesale products (weighted according to the market share of each wholesale product). This would assume that competition is based on a mix of wholesale products. However, this approach does not guarantee the replicability of retail products from competitors using a single wholesale service.

The alternative is to run the MSQT separately for each of the relevant regulated wholesale services that can be used for the provision of the downstream services considered (retail broadband or WBA services in this case).

4.6.1 Proposed relevant wholesale services for the retail MSQT

TRC proposes to implement the retail MSQT separately and not limited for each of the following services, whenever they are relevant to the provision of the retail service considered[21]:

- VULA.
- Bitstream copper, and
- Bitstream fibre services.

These are the wholesale services for which a regulated wholesale offer is available.

4.6.2 Proposed relevant wholesale services for the Wholesale MSQT

The TRC proposes that the wholesale MSQT be implemented considering VULA as the relevant wholesale input. This is for the reasons stated in the section 2.1.

Question 15: relevant wholesale services for the retail MSQT

Do you agree with TRC's preliminary conclusion that the retail MSQT should be implemented separately for VULA, bitstream copper, and bitstream fibre whenever these services are relevant for the provision of the retail broadband service considered? If not, please indicate your alternative views and provide evidence to substantiate your position.

Question 16: relevant wholesale services for the wholesale MSQT

Do you agree with TRC's preliminary conclusion to implement the wholesale MSQT, considering the VULA service as the relevant input? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.7 Assessment of bundles

Currently, all operators in Jordan offer fixed broadband services bundled with other communication services, including fixed telephony, pay TV services and/or mobile services.

Table 2 Fixed broadband residential bundles offered by operators in Jordan

Dimension	Orange Fixed	Umniah	Zain
Speed	24-10,000 Mbps	200-10,000 Mbps	200-2,000 Mbps
Price	15-299 JOD	11-290 JOD	20-50 JOD

[21] VULA will only be relevant for retail broadband fibre offers.

Bundles[1,2]	Triple-play (FV + BB + TV) Double-play (FV + BB)	-	Double-play (FV + BB)
Promotions	Free routers, WiFi extenders, free installation fees	Free fiber router, WiFi extenders, MIFI	Free installation fees, 1 month of cloud gaming and WiFi extenders
Commitment	2 years	2 years	1-2 years

Source: Operators' websites as of February 2024

Note: The analysis considers residential Internet offers for Orange fixed (12 offers), Umniah (11 offers) and Zain (4 offers).

This pattern is observed worldwide, with operators increasingly offering converging offers.

There are two broad options to assess bundles under a MSQT:

1. Aggregated approach - evaluating the margin of the bundled offer as a whole, considering the revenues, wholesale payments and costs associated with the provision of all the services within the bundle;
2. Individual approach - alternatively, assessing the individual margin of the services included in the offer, estimating the revenues, wholesale payments and costs for the provision of the individual services. For example, in a bundle that combines fixed voice and broadband, this would imply estimating the individual profitability of fixed voice within the bundle, considering the revenues allocated to this service and the corresponding wholesale payments and downstream costs.

This second option, therefore, entails identifying and allocating the costs and revenues associated with each bundle element. This is not straightforward and can be done in more than one way. Another complication is that the bundle's revenue data would not truly reflect the consumers' willingness to pay for each service.[22]

Assessing the bundle as a whole, as per the aggregated approach option, does not have this problem. However, an aggregated approach does allow the regulated operator to cross-subsidise between their retail products sold within the bundle. As long as alternative operators can offer similar bundles, this should not be an issue. The flexibility this approach gives for the

22 See ComRef's 18/96 Decision, where this issue is discussed.

regulated operator to recover its common cost has led some regulators to adopt this approach[23].

The section below includes TRC's proposal for the assessment of bundles in the retail MSQT. This dimension is not relevant for the wholesale MSQT, which focuses on individual WBA fibre services for different speeds.

4.7.1 Proposed approach to assess bundled offers in the retail MSQT

TRC proposes to adopt an aggregate approach for the assessment of Orange's retail bundled broadband offers. This is because:

- Orange's competitors offer similar bundles, as per Table 2. Therefore, Orange's bundles that pass the retail MSQT can be replicated by the main alternative providers in Jordan's market;
- An aggregate approach avoids the complication of allocating revenues and costs to the individual services included in the bundle.

Question 17: assessment of bundles in the retail MSQT

Do you agree with TRC's preliminary conclusion to assess bundles in the retail MSQT adopting an aggregate approach? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.8 Consideration of Promotions

Promotions are commercial offers that involve temporary benefits to customers. Such as a discount in the monthly fee for the first three months

Promotions are a standard tool used by operators to compete in the retail market. Therefore, TRC proposes also applying the retail MSQT over the regulated operator's promotions. The challenge, though, is that assessing whether promotions are replicable using the MSQT on an individual basis does not take into account the fact that:

- Some customers can benefit from several promotions simultaneously (overlapping promotions). For example, a customer who benefits from a discount on the monthly fee during the first three months of the contract could also benefit, within the same period, from a different promotion providing a higher broadband speed temporarily.

[23] See ComReg's response to Consultation Document 12/26 and Final Decision on the Pricing of wholesale broadband services.

- Customers may concatenate promotions. For example, benefiting from a given discount in the first three months of the contract, and subsequently adhering to a different promotion that also implies paying a price below the list price[24].

In view of this, TRC proposes to add an ex-post control for promotions. This control consists of estimating the promotional cost incurred by the regulated operator over the last six months and subtracting that cost from the offer's NPV. This additional control ensures that alternative operators can profitably replicate the regulated operator's offer portfolio, including discounts.

Given the lower promotional activity at the wholesale level, TRC proposes to limit this additional control to the retail MSQT.

Question 18: consideration of promotions in the MSQT

Do you agree with TRC's preliminary conclusion that the promotional costs incurred by the regulated operator in the ex-post retail MSQT should be considered? If not, please indicate your alternative views and provide evidence to substantiate your position.

4.9 Treatment for non-residential offers

In Jordan, as in other jurisdictions, broadband operators provide services to customers in the residential and non-residential or business markets. Usually, the non-residential markets have a more comprehensive range of offers, as this segment includes SME[25] and large corporations that require tailored-made solutions. Services delivered to these companies include a wide range of services, such as software packages, storage, security, support services, etc.

For example, the three main operators in Jordan offer standarised non-residential double-play bund

les, targeted at SMEs. These are illustrated as per the Table 3 below.

Table 3 SME fixed broadband offers for non-residential offers

Small business	Orange Fixed	Umniah	Zain
Speed	40-800 Mbps	100-500 Mbps	20-120 Mbps
Price	Not advertised	17-25 JOD	20-25 JOD

24 This is the price of the offer excluding any discounts.

25 Small and medium enterprises.

Bundles	Double play (FV+ FB)*	Double play (FV + FB)*	Double play (FV + FB)*
Promotions	Free WIFI extender, caller ID and forwarding services	Free MIFI and static IP	Free month. Unlimited download capacity
Geographic differentiation	Geographic differentiation in ADSL packages	No differentiation	No differentiation
Commitment	2 years	2 years	2 years

Source: Operators' websites as of April 2024

Note: TRC has analyzed small business Internet offers for Orange fixed (5 offers), Umniah (3 offers) and Zain (2 offers).
** FV + FB refers to fixed voice plus fixed broadband services.*

They also offer tailored connectivity services for bigger non-residential customers or business customers with special requirements. For example, Orange offers solutions to enterprises in relation to security solutions, mobile communications, business connectivity, IoT, and innovation[26].

The retail MSQT is well suited to assessing standardised non-residential offers. However, using a single MSQT to assess tailored non-residential offers is not possible. Therefore, it is uncommon for regulators to assess these offers using an MSQT. Instead, some regulators, like the CMNC in Spain, have developed general guidelines to assess non-standarized business offers[27].

In view of the above, TRC proposes to assess the standardised retail MSQT residential offers and non-residential offers. However, it proposes to exclude from these tests the non-standardised offers for business customers.

Question 19: consideration of non-residential offers in the retail MSQT

Do you agree with TRC's preliminary conclusion to limit the application of the retail MSQT to residential and standardised non-residential broadband offers? If not, please indicate your alternative views and provide evidence to substantiate your position.

[26] In Orange website an enterprise can directly contact ther costumer service to receive customized solutions. https://orange.jo/en/business/enterprise

[27] See https://www.cnmc.es/node/370974.

5 Summary of the proposal

In Table 4 below, TRC provides a summary of its proposal for each key dimension in the design of the retail and wholesale MSQT.

Table 4 Dimensions of the retail MSQT

Dimension	Approach for the retail MSQT	Approach for the wholesale MSQT
Efficiency Level	EEO	EEO
Timing	Ex–ante: before offers are launched (only for flagship offers in the case of fibre) Ex–post: every six months	Ex-ante: before a new reference offer is published or an existing reference offer is updated.
Level of aggregation	Offer level – ex-ante Portfolio level – ex-post Copper: all offers Fibre: only flagship	Individual WBA services within the reference offer
Profitability	NPV over the average customer lifetime	NPV over the average customer lifetime
Wholesale services	WBA copper WBA fibre VULA	VULA
Cost standard	LRIC+ costs (hybrid model) + Orange's financial statements The assessment ex – ante excludes non-network costs, which are shared across offers	LRIC+ costs (hybrid model) + Orange's financial statements
Bundles	Overall profitability of the bundle	
Promotions	Assessed individually ex – ante + ex- post estimation of the promotional cost every six months	
Non-residential offers	Assessment of standardised non-residential offers	

Source: TRC
Note: [Insert Notes]

6 Consultation questions

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Q2.	**Efficiency level for the wholesale MSQT** Do you agree with TRC's preliminary conclusion to consider an EEO approach for estimating downstream costs in the wholesale MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.	
4.2 Timing		9
Q3.	**Timing of the retail MSQT** Do you agree with TRC's preliminary conclusion that the retail MSQT should be applied on an ex-ante basis, complemented with an ex-post MSQT every six months? If not, please indicate your alternative views and provide evidence to substantiate your position.	
Q4.	**Criteria to identify retail fibre flagship offers** Do you agree with TRC's preliminary conclusion on the criteria proposed to identify retail fibre flagship offers? If not, please indicate your alternative views and provide evidence to substantiate your position.	
Q5.	**Timing of the wholesale MSQT**	

	Do you agree with TRC's preliminary conclusion that the wholesale MSQT should be applied on an ex-ante basis? If not, please indicate your alternative views and provide evidence to substantiate your position.	
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Q6.	**Level of aggregation of the retail ex-ante MSQT.** Do you agree with TRC's preliminary conclusion to apply the ex-ante MSQT at the level of individual offers? If not, please indicate your alternative views and provide evidence to substantiate your position.	
Q7.	**Level of aggregation of the retail ex-post MSQT** Do you agree with TRC's preliminary conclusion that the ex-post MSQT should be applied at the portfolio level? If not, please indicate your alternative views and provide evidence to substantiate your position.	
Q8.	**Level of aggregation of the wholesale MSQT** Do you agree with TRC's preliminary conclusion that an offer-by-offer approach is the appropriate level of aggregation to be considered in the wholesale MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.	
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Q9.	**Profitability method for the retail and wholesale MSQT.** Do you agree with TRC's preliminary conclusion that an NPV approach should be used in the retail and wholesale MSQT for broadband offers? If not, please indicate your alternative views and provide evidence to substantiate your position.	
Q10.	**Time horizon for the retail and wholesale MSQT.** Do you agree with TRC's preliminary conclusion that the retail and wholesale MSQT should use the average customer lifetime for the time horizon? If not, please indicate your alternative views and provide evidence to substantiate your position.	

Q11.	**Reasonable profit for the retail and wholesale MSQT** Do you agree with TRC's preliminary conclusion that the reasonable rate of profit should consider the approved WACC rate? If not, please indicate your alternative views and provide evidence to substantiate your position.	
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Q12.	**Cost standard for the ex-ante retail MSQT** Do you agree with TRC's proposed approach for estimating the costs to be used in the ex-ante retail MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.	
Q13.	**Cost standard for the ex-post retail MSQT** Do you agree with TRC's proposed approach for estimating the costs to be used in the ex-post retail MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.	
Q14.	**Cost standard for the wholesale MSQT** Do you agree with TRC's proposed approach for estimating the costs to be used in the ex-ante wholesale MSQT? If not, please indicate your alternative views and provide evidence to substantiate your position.	
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Q16.	**Relevant wholesale services for the wholesale MSQT** Do you agree with TRC's preliminary conclusion to implement the wholesale MSQT, considering the VULA service as the relevant input? If not, please	

	indicate your alternative views and provide evidence to substantiate your position.	
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Q18.	**Consideration of promotions in the MSQT** Do you agree with TRC's preliminary conclusion that the promotional costs incurred by the regulated operator in the ex-post retail MSQT should be considered? If not, please indicate your alternative views and provide evidence to substantiate your position.	
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