THE HASHEMITE KINGDOM OF JORDAN

TELECOMMUNICATIONS REGULATORY COMMISSION

Explanatory Memorandum to the Regulatory Decision on the Market Review of Mobile Markets

Issued by TRC board decision No.(6-12/2020) dated (30/9/2020)

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CHAPTER I: INTRODUCTION

This Explanatory Memorandum summarises and evaluates the comments of telecommunications operators and other stakeholders in Jordan in response to the Public Consultation Document on the Review of Mobile Markets in Jordan, which was published by the TRC in July 2019.

Formal responses to the above Public Consultation Document were received from Jordan Mobile Telephone Services Company (Zain), Umniah Mobile Company (Umniah), Petra Jordanian Mobile Telecommunications Co. Ltd. (Orange Mobile) and Central E-Commerce Co. Ltd (JorMall). Jormall requested that part of its submission remain confidential.

. Formal comments on the above responses were, in turn, received from Orange Mobile, Zain and Umniah.

Briefly, in the Public Consultation Document, TRC proposed to define the following markets:

- A retail market consisting of a cluster of voice and data-related services, including pre-paid and post-paid services, and both residential and business customers;
- A wholesale market for mobile voice call termination on each MNO network;
- A wholesale market for mobile SMS termination on each MNO network;
- A wholesale market for mobile access and call origination (MACO).

All of the above markets were found to be national in scope, covering the whole of Jordan.

The TRC's preliminary assessment was that the above retail market and the wholesale MACO market tend towards effective competition and are therefore not susceptible to ex ante regulation. By contrast, both the voice call termination market and the SMS termination market were found to be susceptible to ex ante regulation.

The TRC's preliminary findings on the assessment of competition in these two markets were that each of the three mobile network operators in Jordan (Orange Mobile, Zain and Umniah) should be designated as an operator with SMP, especially as each has a 100% market share of the termination of voice calls or SMS on their respective networks. This monopoly position has not, and will not, change over time. In addition, there is no countervailing buying power, and any available substitutes are insufficient to alter the underlying structural issue in the market.

Consequently, the TRC proposed certain ex ante remedies for each of these two markets (voice call termination and SMS termination).

Chapter II of this Explanatory Memorandum provides a summary of the comments received by the above operators and a further stakeholder, and TRC's reasoned response, broken down by reference to the following 9 questions put to consultation:

1. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for retail mobile services?

2. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile voice call termination services?

3. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile SMS termination services?

4. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile access and call origination services?

5. Do you agree with the TRC's preliminary conclusions regarding the mobile markets found to be susceptible to ex ante regulation?

6. Do you agree with the TRC's preliminary competition assessment and SMP designations on the market for wholesale mobile voice call termination?

7. Do you agree with the TRC's preliminary competition assessment and SMP designations on the market for wholesale mobile SMS termination?

8. Do you agree with the TRC's preliminary assessment of competition problems and appropriate remedies in the market for wholesale mobile voice call termination?

9. Do you agree with the TRC's preliminary assessment of competition problems and appropriate remedies in the market for wholesale mobile SMS termination?

In the discussion that follows, the TRC has maintained the original sequence of questions set out in the consultation, and, where relevant, provides its assessment of responses to other issues within this framework.

The TRC notes that the respondents have also commented on general issues outside the questions posed in the consultation. Annex 1 addresses such points.

CHAPTER II: SUMMARY OF RESPONDENTS' COMMENTS AND TRC'S RESPONSE

Q1: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for retail mobile services?

Zain agreed with the above product and geographic market definitions.

Umniah generally accepted the TRC's preliminary conclusions on the product and geographic market definitions for retail mobile services. It also agreed with the TRC's conclusion that the relevant market is national in scope. However, Umniah argued that emphasis should be placed on actions and conduct outside of Jordan, which affect competition on the national market, such as Over-the-Top (OTT) services.

Orange Mobile disagreed with TRC's view that the competition conditions in various governorates are similar. Orange Mobile's position was that TRC has not properly substantiated its product and geographical market definitions. Specifically, Orange Mobile agreed with the market definition as comprising a cluster of services (voice, messaging, data), but disagreed with the TRC's proposed definition of a single market for post-paid and prepaid services, as well as with the definition of a single national market.

As regards the former, Orange Mobile argued that the conclusion that post-paid and pre-paid belonged to the same markets was not supported by sufficient research and did not take into account evidence that may indicate an alternative market definition. First, post-paid subscriptions are clearly more expensive than pre-paid subscriptions. Second, competitive conditions in the post-paid and pre-paid segment can differ, as indicated by the variation in market shares of operators in the two segments. Third, according to Orange Mobile, the TRC conclusion that there is supply side substitution between post- and pre-paid was not sufficiently reasoned. The TRC should have considered, for example, that Zain has a 60% market share in the post-paid segment, and that Umniah and Orange Mobile face barriers, such as the club effect caused by Zain on-net/off-net differentiation, and a lack of mobile number portability to increase their share in that segment.

As regards the geographic market definition, Orange Mobile argued that TRC did not conduct a proper analysis of the market – even if the White Paper states that the market should be considered national unless there is evidence of different competitive conditions and a lack of a common pricing constraint. Orange Mobile supported this view by referring to the TRC's comments about competition in Amman being more vigorous (which Orange Mobile does not agree with) and marked differences in the market shares of operators in different Governorates. In addition, Orange Mobile argued that there was price differentiation between regions.

Response of the TRC

The comments received that call for a response by the TRC concern Orange Mobile's objections to (i) the consideration of pre-paid and post-paid mobile retail services as part of a single market, and (ii) the definition of the relevant geographic market as national.

The TRC has considered Orange Mobile's points on pre-paid and post-paid retail services. To find separate pre- and post-paid markets, the TRC would require evidence of a lack of customers' switching[1] between pre- and post-paid services (demand side substitution) and/or an inability of mobile network operators who offer post-paid products to offer pre-paid products (supply side substitution). No such evidence was found by the TRC in the course of its market review, nor was it provided by Orange Mobile in its response.

The TRC maintains that a customer of a pre-paid service could readily switch to a post-paid service, and vice versa, in response to a Small Significant Non-transitory Increase (SSNIP) in the price of the customer's existing service. As for supply side substitution, the underlying network and service provision for pre-paid and post-paid services are not materially different from a technical standpoint, as the main difference relates to the way in which the services are billed. This means that the switch could be made quickly and with little cost. The TRC also notes that its findings are in line with the experience in most other countries.

Consistent with international best practice, one of the cumulative conditions for the definition of a **distinct geographic market** for the purposes of ex ante regulation is that such a market should have clear and stable boundaries over time.[2] This requires going beyond a current snapshot of the market; the regulator must also take into consideration likely competitive developments in the area concerned over a certain time period in the future.

Consequently, a finding of different (narrower than national) geographic markets for wholesale or retail mobile services in Jordan requires clear and stable barriers to mobile operators' expansion from one region into another. No such regulatory or other barriers exist, however. Variations in the three mobile operators' market shares across different regions are no evidence of such clear and stable boundaries, sufficient to define distinct geographic markets, but may be due to factors such as different network coverage in each region, different local distribution and sales arrangements or other factors, all of which may evolve over time. Unsurprisingly therefore, mobile markets are generally defined as national in international best practice as long as the associated mobile licences are also national in scope, regardless of any local variations of market shares or any of the other factors invoked by Orange Mobile.

1 It may be noted that the absence of Mobile Number Portability (MNP) limits the extent to which customers would be able or prepared to switch to an alternative provider of retail mobile services.

2 See, for example, the European Commission's relevant remarks in its 2018 "Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services."

Finally, as discussed in Section 3.3 of the Consultation Document, differentiated pricing by governorate is more likely to be due to demand stimulation measures than to differing degrees of competitive pressures.

In conclusion, the TRC sees no new elements justifying any change to its proposed relevant product and geographic market definitions for retail mobile services.

Q2: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile voice call termination services?

Zain, Orange Mobile and **Umniah** agreed with the above product and geographic market definitions.

Response of the TRC

<u>TRC notes that all of the three mobile network operators agree with its proposed relevant product and geographic market definitions for wholesale mobile voice call termination services. The proposed market definitions will be maintained in the TRC's decision.</u>

Q3: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile SMS termination services?

Zain agreed with the above product and geographic market definitions. However, Zain also pointed out that Exhibit 11.15 of the TRC's consultation document shows overall growth in SMS messages of 26% over the period 2015 — 2018. Zain asked the TRC to note that this growth in SMS traffic has been driven by the increase in Application to Person (A2P) messaging rather than Person to Person (P2P) messaging, which has seen a substantial reduction in usage as consumers have switched to OTT apps. A2P messages include applications such as promotional messages and the sending of security codes for on-line banking applications. Zain concluded that whilst this does not affect the market definition, per se, it does affect the way the market operates.

Umniah agreed with the TRC's preliminary conclusion on the above market definitions. It also agreed that A2P and P2P termination belong to the same market, which is national in scope, in line with the coverage of each mobile operator's network.

Orange Mobile agreed with the TRC's preliminary conclusion on the above market definitions.

Response of the TRC

Based on the above comments, the TRC <u>sees no justification for any change to its preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile SMS termination services</u>.

Q4: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile access and call origination services?

Zain and **Umniah** agreed with the above product and geographic market definitions.

Orange Mobile agreed with the product market definition but not with the definition of a national geographic market, and considered that TRC had not sufficiently researched the possibility of defining local geographic markets. As also discussed in Orange Mobile's answer to Question 1, there are strong indications that competitive conditions and, in particular, market shares and prices, differ across governorates. The wholesale market definition should be consistent with the retail market definition. Hence, when defining wholesale geographic markets, TRC should take into account differences in competition at the retail level.

Response of the TRC

TRC agrees that, in the absence of any exceptional circumstances suggesting otherwise, the geographic definition of the retail market for mobile services should coincide with that of the wholesale mobile access and call origination services. Accordingly, and for reasons similar to those discussed under Question 1 for the retail market, TRC sees no reason justifying a definition of one or more, narrower than national, geographic markets. Therefore, <u>the TRC maintains both its product and geographic definitions for the wholesale market for mobile access and call origination (MACO) services.</u>

Q5: Do you agree with the TRC's preliminary conclusions regarding the mobile markets found to be susceptible to ex ante regulation?

Umniah disagreed with TRC's conclusion that the wholesale market for MACO services does not meet all of the three criteria for it to be susceptible to ex-ante regulation. Umniah argued that appropriate carrier selection and carrier pre-selection remedies (together with ancillary services such as consolidated billing) need to be enforced in the MACO market.

Zain agreed with and welcomed the TRC's conclusion that the wholesale MACO market is not susceptible to ex ante competition. Zain recognised that there are barriers to entry in this market (in particular: access to spectrum and licences). However, it claimed that since the launch of Umniah in 2005 the market has become increasingly competitive and does not, therefore, meet the second criterion: the market is effectively competitive.

According to Zain (citing relevant literature and Ofcom's recent consultation on fibre networks), the presence of three firms in a market is a recognised benchmark for finding a market competitive. Zain further added that, in the period since the 2010 market review, Zain's market share of subscribers had declined with a commensurate rise in shares for Orange and Umniah, and claimed that the shares of the three MNOs were now very similar. It added that international comparison shows that Jordan has a less concentrated market than any three-operator market in the European Union, where the MACO market is not considered susceptible to ex ante regulation.

Orange Mobile agreed with TRC's conclusion that the market for wholesale mobile voice call termination is susceptible to ex ante regulation. However, it did not agree with the conclusion that the markets for (i) retail mobile services and (ii) wholesale mobile access and call origination are not susceptible to ex ante regulation. In Orange Mobile's view, the evidence presented by TRC to support this conclusion was meagre and its analysis far less extensive than in 2010, relying almost entirely on market shares to determine whether the market will tend towards effective competition.

While Orange Mobile is not in a position to review the TRC's confidential data, according to the Arab Advisors data available to Orange Mobile, Zain's market share in revenues, is much larger than that of other operators and exceeds 50%. Moreover, it has been increasing between 2011 and 2016, and, according to TRC, it has also been increasing between 2015 and 2018. Additionally, according to Orange Mobile, the following factors give an advantage to Zain and increase its SMP:

- Zain has the largest spectrum holding (57 MHz vs. 47.5 MHZ held by Orange Mobile Jordan and 35 MHz held by Umniah).
- Zain has the largest network coverage in Jordan.[3]

[3] For example, according to Telegeography, in 3G Zain has 99% coverage, Orange Mobile 96%, and Umniah 90%.

- Zain has the highest brand recognition in Jordan. According to the 2018 IPSOS study, for 49% of customers, Zain is the first mobile brand that comes to mind. In Amman, at 60%, Zain's advantage is larger still.[4]

- Since 2010, new taxes and fees have been introduced in the mobile sector. This affects heavily the profitability of the operators (the smallest of which are barely commercially viable) but has a lesser effect on Zain, which has consistently been making profits. Zain's sustained higher profitability is a clear indicator of a competitive advantage enjoyed by the dominant operator.

According to Orange Mobile, these factors allow Zain to increase further its advantage through on-net/off-net price discrimination, and refuse access to its networks to other operators such that would permit them to offer services to Zain consumers based on CS/CPS access.

Orange Mobile further argues that, instead of being an indicator of strong competition (as argued by the TRC), low pricing in the mobile market in Jordan puts pressure on operators' profits, especially the smaller ones, with a negative impact on investment and innovation. As a remedy, Orange Mobile argues in favour of imposing a price floor.

Orange Mobile included suggestions of actions which could be taken by the TRC to improve the competitive situation. Orange Mobile's proposals included the introduction of MNP, reducing taxes, and aligning spectrum fees.

Response of the TRC

The TRC disagrees with Orange Mobile's views on the alleged lack of effective competition on the mobile market in Jordan. As also shown in the statistics provided by Zain, the Jordanian mobile market is actually less concentrated than most three-operators markets – whose regulators do not, generally, find these markets to be susceptible to ex ante competition.

According to the TRC's recent information, both Orange Mobile and Umniah have increased their revenue-based market share in 2019, compared to Zain, whose corresponding share has decreased below 50%. It would be very unusual, by international standards, for an MNO to be designated as having SMP under these circumstances.

As also indicated by international experience, the question of on-net/off-net pricing is more effectively addressed through the regulation of mobile termination charges. The TRC's ex ante remedies for mobile termination, which include a glide path reducing termination rates to a cost-based level (from a blended rate of 11.6 fils/min in 2018 to 2.0 fils/min in 2021), should be sufficient to avert any risk of material competitive distortions in this regard.

4 Ipsos, Telecom Scene Tracker Report, July 2018.

There is also no current international precedent for a mobile version of CS/CPS, which would seem to be an obsolete technology and hence a disproportionate, if not totally redundant, remedy. In fact, this is the case even with the fixed version of CS/CPS, despite its use in earlier stages of liberalization and the more significant barriers to competition for fixed networks.

The TRC notes that some suggestions of actions it could take are outside the remit of the market review. For example, while the introduction of mobile network portability (MNP) could indeed contribute to competition on the mobile retail market, this would normally be a symmetric remedy, applicable to all mobile network operators' regardless of their (actual or alleged) dominant position. Issues to do with taxation and spectrum fees are also broader concerns than those dealt with in the market review process.

Finally, since low retail prices in Jordan are more likely to be indicative of competition in the market, any intervention by TRC within the framework of ex ante regulation in favour of a price floor would be at odds with the principles of promoting competition that underpins such regulation, especially in the absence of a dominant operator in the market concerned. Indeed, imposing price floors could be tantamount to an official approval of cartel behaviour by the operators.

To conclude, the TRC disagrees both with the view that mobile markets other than the markets for wholesale mobile voice call and SMS termination are susceptible to ex ante regulation, and with the merits of the specific remedies proposed. TRC therefore maintains its conclusion that (i) the market for retail mobile communications and the market for wholesale mobile voice call termination are both **not** susceptible to ex ante regulation; and that, by contrast, (ii) the wholesale markets for mobile voice call termination and mobile SMS termination on each MNO network are susceptible to ex ante regulation.

Q6: Do you agree with the TRC's preliminary competition assessment and SMP designations on the market for wholesale mobile voice call termination?

Zain accepted that voice call termination is a monopoly for each terminating network and, therefore, regulatory measures are required to prevent firms from abusing that position. However, Zain argued that OTT calling apps such as WhatsApp potentially bypass termination and may, therefore, constrain even a monopolist of voice call termination from raising prices above the competitive level. Zain did not see sufficient evidence of such substitution occurring today to affect either market definition of mobile call termination or an assessment of dominance in the market. Nevertheless, on a forward-looking basis, Zain's view was that the TRC should be aware that such substitution is likely to become stronger and so even this market may not fulfil the three criteria test in future.

Orange Mobile agrees with the TRC's conclusion that, in the markets for wholesale mobile voice call termination, all three operators that terminate calls on their mobile networks have SMP.

Umniah also agreed with the above TRC conclusion. However, it also argued that Zain, with more than ~3.3 million subscribers, will have significantly more impact on competition as a result of its dominance for calls terminated on its network than a mobile operator having much less subscribers.

Response of the TRC

Based on the above comments, the TRC <u>sees no justification for any changes to its competition assessment and SMP designations on the market for wholesale mobile voice call termination.</u>

Q7: Do you agree with the TRC's preliminary competition assessment and SMP designations on the market for wholesale mobile SMS termination?

Umniah agreed with the methodology adopted by the TRC to assess whether these markets are characterized by dominance, and the conclusion reached by the TRC that each mobile operator is considered 100% dominant for the termination of SMS on its own network. It also agreed with the TRC's view that, under the current bill-and-keep regime, no operator can abuse its power and that if mobile operator starts to charge for SMS termination the structure of the market will become similar to that for mobile voice call termination.

Orange Mobile did not agree with the TRC that the market for wholesale mobile SMS termination is susceptible to regulation given the current market circumstances, and therefore considered that an SMP analysis in this market is not necessary.

Zain agreed with TRC's finding, commenting that, although messaging apps are substitutes for SMS for P2P messaging, it did not believe that OTT apps are an effective substitute for SMS messaging for A2P messages, which account for an ever increasing proportion of SMS. This is because there exists a plethora of messaging apps, and some mobile users may not have subscribed to a particular or indeed any such app. A2P message originators, therefore, rely on SMS to ensure they can reach all mobile customers on a single platform. Zain also agreed with the TRC's comment that the current bill-and-keep arrangement is voluntary and may well come to an end during the period of this review. If it did, Zain thought that there is a real risk that mobile network operators could raise the price of SMS termination to the monopoly level. In these circumstances, originating networks would have no choice but to pass a price rise of SMS termination on to their customers. Inevitably this would cause significant harm to consumers and a reduction in consumer welfare. Zain view, therefore, was that the TRC is right to prevent such behaviour by regulating this market and taking control of the termination rate for SMS messages.

However, Zain also added that the points made concerning Question 6 above (regarding substitution through OTT services, at least on a forward-looking basis) are also applicable to SMS termination for P2P messaging.

Response of the TRC

The Consultation Document explained that there would be no need for ex ante regulation if the bill-and-keep regime were to remain in place. However, as this is a voluntary, commercial, regime, and the TRC has already been notified that Zain wants to exit it, there is no option but to consider the environment absent the bill-and-keep regime. While the SMS termination rates mentioned in the Consultation Document may require some further review and updating, this does not affect TRC's conclusion, which remains intact, namely that <u>each mobile network operator is dominant on the wholesale market for the termination of SMS on its individual mobile network</u>.

Q8: Do you agree with the TRC's preliminary assessment of competition problems and appropriate remedies in the market for wholesale mobile voice call termination?

Orange Mobile agreed, in principle, with the TRC's conclusion that SMP in wholesale voice termination markets can lead to competition problems, and that remedies are required. However, Orange Mobile did not fully agree with the proposed remedies, arguing that they were not targeted at competition problems and were not proportionate, as they would not take into account the differences between operators. Instead, Orange Mobile strongly proposed (i) maintaining the obligation for Zain to provide mobile termination rates (MTR) at the weighted average of on-net price but that (ii) the MTR should be asymmetric and lower for Zain than for Orange Mobile and Umniah.

Specifically, Orange Mobile argued that the high MTRs by the largest operator are much more distortive of competition than those applied by smaller operators, when one takes into account the club effect of on-net/off-net differentiation, and the easier subsidization of the larger operator's retail prices through its high MTRs.

In addition, according to Orange Mobile, symmetric MTRs set at long run incremental cost do not fully remove the threat of margin squeeze applied by the SMP operator. As the long run incremental cost is typically higher than the short-term marginal cost, Zain would still have incentives to set on-net retail prices below the MTR. By contrast, asymmetric rates would reduce the dominant position of Zain; allow for more competition for postpaid and other high-usage segments; and help improve price and quality in the future, against the current loss-making performance of Orange Mobile and Umniah.

Orange Mobile added that negative effects from asymmetric MTR, while theoretically possible, were unlikely in Jordan. Such negative effects could theoretically include encouraging inefficient entry and discouraging smaller operators from becoming more efficient, and from increasing their market share. However, entry of new operators is unlikely anyway, given the mobile market's low profitability. Further, it is "highly unlikely" that Orange Mobile and Umniah would maintain high costs and decrease margins on retail services to increase their termination revenues, as these comprise a small share of their total revenue.

In addition, Orange Mobile objected to the obligation to provide an annual statement of compliance with the non-discrimination obligation. In its view, such an obligation would put a high administrative burden on operators and be disproportionate Orange Mobile also thought that there is no legal basis for such an obligation given that TRC already has power to monitor the licensees' compliance to all market regulations.

Umniah had several comments on the remedies for this market. As regards the removal of Zain's non-discrimination obligation under board decision no (9/1/2004), Umniah did not think that such asymmetrical remedy imposed on Zain was enforced in a timely manner, sufficient to diminish the impact of on-net/off-net pricing on the mobile retail market. Another example of a non-enforced remedy on Zain is the provision of Carrier Selection/Carrier Pre- Selection.

Umniah stated that accounting separation is a must to ensure fairness of price and the establishment of the non-discrimination principle and expose issues such as unfair cross subsidization. However, as the details of this obligation for all mobile network operators will follow in later TRC measures, after the adoption of the TRC's decision, Umniah reserved its position on the merits of these details.

Umniah expressed concerns regarding TRC position that it would be detrimental to operators to change the glide path set fairly recently, for risk of undermining regulatory certainty in the market. Umniah remarked that the glide path is implemented only for mobile and fixed termination. The interconnection charges for all other mobile or fixed interconnection services are the same for the period 2018-2021 at the average cost calculated by TSLRIC+ model. Umniah argued that the immediate implementation of the new TSLRIC+ rates will reduce the disruption to the industry caused by on-net and off-net mobile offerings, deliver more effective competition and ultimately benefit consumers. Umniah added that the TRC has extended the validity of the approved 2014 TSLRIC+ interconnection rates until the finalization of the new models' review. As a result, the same interconnection rates are in force for more than 3 years, undermining benefits to competition and ultimately consumers.

According to Umniah, high MTR & glide path have a lower impact on competition if all mobile operators have a similar market share. Similar market shares underpin the efficient mobile operator traffic used in the MCT cost model as 1/3 of market share of all mobile operator traffic, and theoretically lead to equal traffic used for outgoing calls to another mobile operator and incoming calls from another mobile operator. Umniah believes that, thanks to its higher market share, Zain will generate excess profit from MTR set above cost for the period 2018-2020, which will help leverage Zain's dominant position in the retail mobile market. By contrast, Umniah will suffer from additional interconnection cost, which will further weaken its position in the market in comparison to Zain and Orange.

Zain welcomed TRC's proposal to impose the same remedies on Umniah as it has on Orange and Zain, contrary to the last market review, which did not impose any remedies on Umniah. According to Zain, Umniah was and is a significant player in the market, with a market share approximately the same as Orange and Zain and so there is no reason for it not to be subject to the same regulations,

Zain supported the TRC's proposal that all requests for access will be assumed to be reasonable, with the onus falling on the SMP operator to justify refusal of access. It also did not object to the obligation for operators to negotiate in good faith although it questioned the effectiveness of such an obligation. It found the proposal to conclude negotiations in a manner that is "fair, reasonable and timely" too vague. The TRC should be more specific with regard to what "timely" means and should consider setting a limit on the time allowed to negotiate.

Zain supported the continued implementation of non-discrimination obligation on all operators and was pleased to see that the TRC plans to withdraw the TRC Board Decision no. 9-1/2004. Zain has been arguing for a long time that this decision had become outdated and had been overtaken by events including, in particular: Zain's significantly lower subscriber market share today; reliance on LRIC for MTR, which has rendered on-net/off-net call rates very similar; and the existence, today of a wide variety of OTT-based alternatives to voice calls using termination services, but not paying any MTR.

Zain also commented that, if the review of mobile market been conducted earlier, in line with the two to three period set out in the TRC's White Paper on market reviews or with the EU policy of conducting reviews every three years, Decision 9-1/2004 would have been revoked earlier. It therefore proposed that the revocation of Decision 9-1/2004 should be backdated to the date when the LRIC model for mobile termination was introduced.

Zain commented that it is not clear from the consultation document if the model text of the proposed Statement of Compliance will be subject to further consultation. Given the importance of this proposed measure, Zain expects that it will be and will provide further comments at that time.

Zain also agreed that full accounting separation is not required and therefore supported the move towards the supply of "relevant accounting information" in this market, as long as this requirement does not become disproportionately burdensome. Zain will wait for the TRC's further documentation on this issue to finalize its position. Further, it provisionally accepted the TRC's proposal for a Unified Reference Offer (URO), assuming that the TRC will consult on the details of the URO.

Zain broadly welcomed the TRC's proposal regarding Key Performance Indicators (KPIs). In particular, it welcomed the proposal to ensure that each SMP operator provides data that compare the service provided to itself and to other operators. In Zain's view, KPIs should not be provided only to the TRC but should be published on operators' websites so that they are fully transparent and available to other stakeholders as well as customers. Such publication should only happen once the TRC has tested, verified and approved the KPIs to ensure operators do not attempt to use unverified KPIs to mislead customers and distort competition. It was not clear to Zain, from the consultation document, whether the TRC planned to consult on its proposed KPIs. Nevertheless, it expects to see further details on the KPIs and will comment on these when the relevant document is published.

Zain also agreed with the continued glide path for termination rates.

Response of the TRC

The disadvantages of asymmetric mobile termination rates, and the narrowly defined conditions under which these may be an acceptable option in the context of ex ante regulation have been the subject of early, and by now well-established, debate in international best practice.

As highlighted by the European Commission,[5] temporary asymmetric rates are sometimes used in favour of later entrants, as an overall entry assistance policy –

[5] See the Explanatory Memorandum to the 2009 Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, also relied upon more recently, for example, in OFCOM's "Mobile call termination market review 2018-21",

but not as a semi-permanent feature as long as there is any imbalance in market shares. Both Orange Mobile and Umniah are now well beyond the state of such an early market entry that could merit some support through such an asymmetric mobile termination regime: the European Commission has commented that it is reasonable to envisage a timeframe of four years (from the date of entry of the operator concerned) for phasing out asymmetries in mobile markets, based on the assumption that in the mobile market it can be expected to take three to four years to reach a market share of between 15 and 20%. All of the three MNOs in Jordan have a market share of more than 20% and have been on the market for much longer than four years. Traffic now between the MNOs is sufficiently balanced to remove any excuse for an asymmetric mobile termination regime. There is no new entrant into the market for whom such an asymmetric regulation could be considered at this stage.

As also remarked by the European Commission, consumers may well be expected to end up "*paying higher retail prices than would otherwise be the case in a situation of cost-based symmetric termination rates. In addition, providing a mark-up for new entrants while regulating incumbents at cost effectively creates a cross-subsidy and can simultaneously reduce the incumbents' investment incentives*." This is why the European Commission has supported the view, which is also followed by most national regulatory authorities in developed ex ante regulation regimes, that symmetric price control, based on an efficient-cost benchmark, rather than on the costs actually incurred by an operator, gives efficient investment incentives to operators. The TRC agrees with this approach, and does not agree with Orange's Mobile views on the benefits of asymmetric MTRs.

The TRC has also noted the MNO complaints that remedies imposed in the previous market reviews have not been implemented. The remedies proposed by the TRC including, in particular, an annual statement of compliance, aim to address this gap observed in recent years by strengthening implementation, within the existing scope of the TRC's overall supervisory and enforcement powers.

The TRC has considered Orange Mobile's claim that the Statement of Compliance is unnecessary and costly. In the TRC's view, the Statement of Compliance is not an additional burden on Orange Mobile. It is a measure that is designed to allow Orange Mobile to demonstrate its compliance with its non-discrimination obligations, and if Orange mobile is compliant, there should be no additional burden. As such, the TRC's legal power to require a Statement of Compliance is also part of its broader power to impose non-discrimination obligations with appropriate monitoring and enforcement mechanisms, for which there is a clear need. The TRC notes that, across the whole market review process, both Umniah and Zain emphasised the need for stronger enforcement of remedies, and the requirement for a Statement of Compliance is one element addressing this need.

The TRC has considered Umniah's points on the relationship between market share and the level of MTR. For reasons of confidentiality, market shares were not published in the Consultation Document, and Umniah's response has therefore to be

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para. 4.15.

based on its own assumptions rather than on the actual data. The TRC considered market shares by subscriber numbers, revenue and traffic volume in coming to its conclusions. As noted earlier, on all metrics, all three operators have established market shares that would be considered higher than the Minimum Efficient Scale, and the concerns expressed by Umniah are not relevant in the market.

Finally, the TRC cannot accept Zain’s request for a backdated revocation of Decision 9-1/2004. Backdating in such a case would seem legally questionable and would create, in any event, a negative precedent of legal uncertainty in the regulatory environment.

Q9: Do you agree with the TRC's preliminary assessment of competition problems and appropriate remedies in the market for wholesale mobile SMS termination?

Orange Mobile remarked that, currently, SMS termination is not regulated, as operators maintain a voluntary bill-and-keep regime, meaning that they do not charge each other for SMS termination. Orange Mobile disagrees with the cost-based regulation of SMS termination tariffs proposed by the TRC. According to Orange Mobile, TRC should, as a priority, prevent the bill-and-keep regime from folding. Increasing the cost of SMS-termination above zero would allow Zain to apply on-net/off-net discrimination on SMS in addition to voice services, exacerbating the club effect and putting other operators at an even larger disadvantage. Orange Mobile claimed that TSLRIC+ regulation does not prevent a squeeze, as long as the termination rates are above the short-run marginal cost of termination. In addition, the bill-and-keep regime has an advantage of keeping the administrative and regulatory costs to the minimum.

Orange Mobile further argued that there is an internal inconsistency in TRC policy regarding MTR and SMS termination rates. On the one hand, TRC lifts the non-discrimination obligation imposed previously on Zain on the grounds that lowered MTR limit the largest operator's possibility to apply on-net/off net discrimination to put competitors at a disadvantage. With respect to SMS termination, TRC however seems to disregard that increasing the SMS termination tariffs will enable Zain to create tariff differentials between on-net and off-net tariffs, creating a club effect on SMS and strengthening its dominant position.

Furthermore, Orange Mobile objected to the obligation to provide an annual statement of compliance with the non-discrimination obligation. It claimed that such an obligation puts a high administrative burden on operators and is disproportional. It also argued that there is no legal basis for such an obligation given that TRC already has power to monitor the licensees' compliance to all market regulations.

Umniah urged the TRC to carefully study the proposed cost to be charged for SMS termination considering that the proposed cost was inefficient if compared to a voice minute costs; according to Umniah, the SMS termination cost should not exceed 50% of the voice termination cost per minute. Further, the fact that no cost was proposed for 2021 may create legal uncertainty.

Zain agreed with the TRC's proposed remedies in this market. It also considered it essential that regulated SMS termination rates should be symmetrical, i.e. the same for all operators, as suggested by the TRC and determined by its FW-LRIC model adopted by the TRC. Zain argued that as the three mobile networks are of roughly the same size, there would be no justification for asymmetric termination rates.

JorMall gave an overview of the A2P market in Jordan (specializing in banking, advertising and other services) and its contribution to the economy. According to JorMall, up and until 2017, all the MNOs were conducting their A2P business on a wholesale basis only. In 2017, one MNO started entering the market on retail basis by selling directly to end users. As competition intensified between MNOs, some MNOs started to take steps to penetrate the A2P SMS business by exploiting their dominance and SMP, according to JorMall, e.g., by refusals to deal with some A2P companies, through discriminatory, excessive or predatory wholesale prices, blocking inbound SMS originating on other networks, wrong reporting, exploiting the profiling of their customer basis to the advantage of their own retail A2P services etc.

Despite such practices, however, JorMall claims that A2P companies have continued to grow and service their clients, competing strongly against social media platforms and OTT messaging. MNOs should consider closer cooperation with A2P companies.

However, JorMall expressed the view that changing the present legal regime would lead to major losses for A2P vendors. Its concerns seem to be linked to the general risk of replacing the “tried and tested” bill-and-keep system that A2P companies have been relying on with a system of termination charges, which, in JorMall’s view will lead to a A2P SMS market failure and give MNOs SMP and the possibility to exercise it in full. Specifically, the termination rates mentioned in the Consultation Document (study (4.68 fits for 2019 and 6.09 fils for 2020) are double or more than the average selling prices of the A2P vendors. JorMall average price currently is 2.8 fills per SMS and is expected to go down even further as volumes grow. The proposed termination rates will double or triple the current prices, which will lead to grave and unsustainable losses for A2P companies. SMS prices will increase considerably and consumers will shift to alternative communication platforms, especially social media and OTT channels. Problems for A2P companies will be further aggravated through their long-term contacts and commitments with MNOs (of 1 to 5 years) and their long term contracts (1 to 3 years) for the sale of SMS.

At the same time, JorMall acknowledged that termination fees will be paid by the MNOs to the MNOs and will not be reflected on the A2P business.

Further, according to JorMall, if a termination fee were to be introduced, MNOs can manage the transactions on a local basis but will not be able to impose any termination fees on inbound traffic from outside Jordan.

Response of the TRC

As mentioned in the Consultation Document, the current bill-and-keep regime has been voluntary and has served its purpose for as long as all three MNOs have been in commercial agreement to maintain it. However, the TRC’s market review has shown that at least one MNO prefers to terminate this bill-and-keep arrangement. Once this is done, a shift to a calling party pays regime will mean that similar competitive characteristics and justifications for ex ante regulation will apply to SMS termination as those applying to voice call termination.

Accordingly, the reasons justifying the ex ante remedies to be imposed on voice call termination are also applicable, by analogy, to the termination of SMS. In particular, and contrary to the point raised in some operator comments, remedies for SMS termination should be symmetrical, for the same reasons that they should be symmetrical in the case of voice call termination.

It is true that the shift from a bill-and-keep regime to one where wholesale SMS termination is regulated ex ante may have an impact on competitive dynamics on the market. Nevertheless, the strict and symmetric remedies now proposed will help address any risks of a distortions of competition, some of which are alleged to occur already today, under the present bill-and-keep system, including, for example, a refusal to terminate SMS generated on another network or its discriminatory treatment. It is exactly through the imposition of ex ante remedies of access to SMS termination services upon reasonable request, non-discrimination, transparency, accounting separation and price control, which will be imposed on this market, that the examples of (actual or alleged) abusive conduct can be identified and stopped.

With reference to Orange Mobile's comments on an on-net/off-net club effect, if this is at all a real prospect, it is more likely to disappear through an orientation of SMS termination on costs – as is also the case with voice call termination.

In the Explanatory Memorandum accompanying its 2014 Recommendation on relevant product and service markets for ex ante regulation, the European Commission has suggested, as the only basis for exemption of SMS termination from ex ante remedies, their substitution through emails and instant messaging, which are more and more available due to an increase in smart phones and broadband penetration. As confirmed by the comments received and evidenced by the operators' interest in the regulation (or non-regulation) of SMS termination, and the existence of an important and evolving A2P industry in Jordan, the SMS market is not about to be replaced through OTT alternatives. Accordingly, the condition mentioned above for potentially removing ex ante regulation of SMS termination is not fulfilled.

Last but not least, some of the issues reported by JorMall in particular, seem to arise from MNOs' conflict of interest between serving as a platform for A2P services by third parties and providing their own A2P retail services. Conceptually, this problem bears some similarity with similar conflicts reported internationally with certain online trading platforms (e.g., in the Amazon Marketplace case) that sell their own services through their platform in competition with third parties that trade on the same platform. Again, it is exactly through the set of ex ante remedies proposed for the wholesale SMS termination markets that such conflicts can be better addressed. (This is contrary to online trading platforms which are not yet subject to such ex ante regulation and whose alleged anti-competitive conduct requires lengthy and litigious ex post intervention by the competent authorities.)

Since publishing the Consultation, the TRC has reviewed its cost model for SMS termination. For this reason, the TRC will, as part of the implementation, determine the new prices for wholesale SMS termination.

In conclusion, the TRC <u>sees no justification for any changes to its assessment of competition problems and appropriate remedies in the market for wholesale mobile SMS termination.</u>

ANNEX 1: SPECIFIC ISSUES

Respondents raised a number of issues outside the structure of the consultation questions. Insofar as these comments have not been addressed under one of the consultation questions, they are summarised below, and followed by the TRC's response.

Orange Mobile noted the following:

- Orange Mobile pointed to a list of information that was, in its view, incorrect or incomplete in the Public Consultation document;
- It expressed a view that the TRC's market definition methodology was inadequate, and proposed that the market definition should be based on consumer preferences underpinned by robust evidence;
- Orange Mobile argued that the TRC should have carried out an impact assessment;
- In Orange's view, the TRC's approach was high level, lacked detail and generally was not substantiated with evidence.

Umniah noted the following:

- In the retail mobile market, although all operators are dominant for the provision of termination services on their own network, Zain's market share confers advantages.
- Cost-based MTRs will reduce the disruption to industry caused by on-net and off-net mobile offering and will deliver more effective competition and ultimately be to the benefit of end consumers.
- Mobile Number Portability is a very important facilitator of competition. Umniah urges the TRC to take the necessary regulation that will enable the provision of MNP in Jordan by 2020.
- Umniah agreed with the TRC's approach to OTT in the market definition, but raised the issue of internet services provided outside the domain of telecommunications law, and by companies outside Jordan.

Zain noted the following:

- The TRC should continue to monitor OTTs, to ensure that the interests of operators are not harmed and that consumers benefit
- Zain questioned restrictions associated with spectrum allocation, and urged the TRC to transition to full technological neutrality

Response of the TRC

- *Orange pointed to a list of information that was, in its view, incorrect or incomplete in the Public Consultation document.*

The TRC reviewed and analysed in detail every point raised by Orange. The TRC notes that it relied on data provided by operators and that, in some cases, operators (including Orange Mobile) did not provide complete data in a timely manner. Where possible, the TRC has cross-referenced data provided for the market review with data provided to the TRC for other purposes. The TRC's conclusion is that Orange Mobile's view of data is incorrect and unsubstantiated.

The detailed list of comments received from Orange and corresponding responses of TRC are provided in Annex 2 where TRC notes the need for minor updates on consultation document due to some comments highlighted in the table. However, TRC notes that these minor updates do not require any revisions on the overall conclusions.

- *Orange Mobile expressed a view that the TRC's market definition methodology was inadequate, and proposed that the market definition should be based on consumer preferences underpinned by robust evidence.*

Orange Mobile does not appear to have fully understood the methodology underpinning market definition. The TRC (in common with other NRAs) based its definition of markets on a hypothetical monopolist test (HMT). The HMT considers the effect of a small but significant non-transitory increase in prices (SSNIP) in a focal product. As the name suggests, the situation under examination is hypothetical – it is not the behaviour of an actual monopolist that is being evaluated. The test is considering what a sufficient number of customers would be likely to do in response to a SSNIP that would render the price increase unprofitable. Sometimes, it is possible to look at what customers have actually done in response to a price increase, and here, for example, general trends in the market may be considered. Examples like this could be used to substantiate a view of the HMT – but would need to be caveated as the actual behaviour would not relate to a hypothetical monopolist but rather to an actual operator. The HMT is, by definition, a theoretical exercise.

The TRC notes that some NRAs may use consumer surveys in order to explore consumer preferences. By using surveys, NRAs are trying to explore what consumers may choose to do in a hypothetical situation – they are asking the consumer to imagine an action that they might take in a future situation. Experience shows that a much higher proportion of consumers claim that they would switch product in response to a SSNIP than ever actually switch product in response to a price increase.

The TRC notes also that survey findings are rarely decisive. Where NRAs commission surveys, their interpretation of the findings is usually heavily caveated. The survey findings are treated as just one further input to the overall analysis, and not as the definitive input. Reviewing the experience of international NRAs led the TRC to question how valuable and proportionate a consumer survey would be. This allowed the TRC to consider survey inputs without being dependent on them in its analysis.

- *Orange Mobile believes that the TRC should have carried out an impact assessment.*

The TRC has been conducting an impact assessment throughout the course of its work, and this market review is a result of this assessment. At an early stage of the Project, the TRC identified the impact of previous regulatory measures, and at each stage of the Project it has considered options and alternatives. At all times, the TRC has been concerned to ensure that any proposed remedies are appropriate and proportionate, and that therefore the regulatory costs do not outweigh the benefits. The consideration of the impact of proposed measures has therefore been embedded in the conduct of the whole analysis.

- *In Orange's view, the TRC's approach is high level, lacks detail and generally is not substantiated with evidence*.

The consultation drew on a detailed data gathering exercise. Operators were required to complete data requests covering quantitative and qualitative data, and the analysis of this data forms the basis for the evidence used in the Consultation. In addition, data collected by TRC for other purposes was used to confirm and validate data provided by operators. The project team met with operators (in some cases, several times) during the process, and took account of all discussions. It is recognised that much of the data analysis had to be redacted in the public version. This is because the information is commercially sensitive.

- *Although all operators are dominant for the provision of termination services on their own network, Zain's market share confers advantages*
- *Cost-based MTRs will reduce the disruption to industry caused by on-net and off-net mobile offering and will deliver more effective competition and ultimately be to the benefit of end consumers*

As Umniah has recognised in its submission, the remedies imposed in the wholesale market for mobile termination are designed to reduce the advantages conferred by larger market shares. The obligation that MTRs should be cost-based is the most effective means of reducing the advantages associated with the club effect and on-net/off-net pricing.

- *Mobile Number Portability is a very important facilitator of competition. Umniah urges the TRC to take the necessary regulation that will enable the provision of MNP in Jordan by 2020*

The TRC agrees that MNP is important. The introduction of MNP is, however, outside the scope of the market review.

- *Umniah agreed with the TRC's approach to OTT in the market definition, but raised the issue of internet services provided outside the domain of telecommunications law, and by companies outside Jordan.*
- *The TRC should continue to monitor OTTs, to ensure that the interests of operators are not harmed and that consumers benefit.*

The TRC notes comments on OTT services, and will continue to monitor their development in Jordan.

- *Zain questioned restrictions associated with spectrum allocation, and urged the TRC to transition to full technological neutrality*

The TRC notes Zain’s comments. However, spectrum allocation is outside the scope of the market review.

ANNEX 2: COMMENTS FROM ORANGE

Orange Mobile provided additional detailed comments on alleged errors and omissions in specific paragraphs of the TRC consultation, which are replicated below. TRC provided responses next to each comment.

Page	Section	Comment	TRC Responses
4	Executive Summary	TRC has not considered that the increase is due to A2P and Adv Bulk SMS sent by Bulk service providers, where P2P SMS is declining due to use of OTT interactive messages (e.g. Whatsapp)	Orange commented that A2P and Adv Bulk SMS sent by Bulk service providers were not considered. However, A2P and Bulk SMS have been considered for the analysis, as can be found in section 3.4. In the executive summary, the relevant findings are highlighted at a high level.
4	Executive Summary	It is not clear why TRC concludes that Zain has slightly higher market share than Umniah and Orange Mobile. The most recent data on the number of active mobile customers, published by TRC for Q1/2019, show the following figures: 3,605,262, 2,462,921, and 2,007,079. This implies that Zain's market share is 44.6% which exceeds Umniah's and Orange's Mobile market shares.	Orange refers to the word "slightly". According to data provided by operators, the 2017 market share of Zain is close to that of the second largest operator. In 2018, it was about 10% points higher, so the reference to 'slightly' in the Executive Summary can rightly lead to misinterpretation. However, none of the conclusions depend on the wording used in the Executive Summary. Further, the market shares estimated and published by TRC are based on a different methodology compared to that referred to in the Market Review.
4	Executive Summary	The mobile penetration reported on this page is 98% while on page 11, it is 85%.	Orange commented on the differences regarding mobile penetration rates mentioned in two different sections. Reference in Executive Summary (Page 4): "Mobile penetration is around 98%, with over 90% of mobile customers using a pre-paid plan" Reference in Section 2.2 (Page 11): "Based on a 2018 population of 10,289,110[6], mobile penetration rates are at around 85, suggesting that mobile subscription ownership is near ubiquitous" The mismatch is due to the latest update performed in the figures of 2017 and 2018. The mobile penetration in the Executive Summary section must be updated to "85%"

[6] TRC

Page	Section	Comment	TRC Responses
			which represents the 2018 figure. But this error does not affect the conclusion of mobile market review.
4	Executive Summary	The share of prepaid subscribers reported on this page is over 90%, while on page 11 it is 85.3%.	Similarly to the above comment, Orange indicated the mismatch between the share of prepaid subscribers existing in two different sections that occurred as a result of updating the 2017 data to 2018. The figure for prepaid subscribers in the Executive Summary section will be changed to “85.3%” which corresponds to 2018. This error too does not affect the conclusion of mobile market review.
9	1.5	As per TRC regulations, the period to provide inputs is 14 days not 10 days.	Orange mentions that the period to provide input is 14 days. TRC accepts that it is indeed a typo which needs to be corrected to **15** days.
12	2.2	TRC has not explained the decline of dedicated data subscriptions for stand-alone services in 2018 compared with 2017, 2016, and 2015. Moreover, the figure of dedicated data subscriptions for stand-alone services in 2017 does not match the data published in the TRC annual report 2017. This shows that the dedicated data subscriptions for stand-alone services in 2017 is 2,126,808 whereas the metric stated in Exhibit II.2 is 2,594,147.	First, Orange emphasizes that TRC should explain the decline of dedicated subscriptions for stand-alone services between 2015-2018. It is important to note that the information for 2018 was collected later in order to ensure that the market review captured the latest information. However, the basis for the analysis and conclusions are 2017 figures, as these were the most extensively reported and verified information. 2018 figures were reported sometimes till the latest available period (Q3 or Q4). Nevertheless, all the operators reported figures that were dropping, which resulted in the decline in the overall figures. Orange also refers to the contradiction of dedicated data subscriptions in 2017 mentioned in the Consultation Document and TRC Annual Report. The sources for the values presented in the public consultation document have been obtained from the

Page	Section	Comment	TRC Responses
			operators, based on their responses to the Data Request. In the Annual Report, the entry could have been made following a different definition by the end of 2017. For this reason TRC chose to use the most recently submitted data .
12	2.2	Foot note 5: We query why such data has not been provided by Zain and Umniah. We understand that all operators should provide quarterly and annual reports to TRC on a regular basis.	Orange emphasizes the importance of data provision by Zain and Umniah. However, in this case, both Zain and Umniah reported the total data volume, which was used to extract the "Actual usage of Standard Mobile Broadband Subscriptions". Even if the subscribers are not using data, the data are activated and hence this becomes a reasonable assumption to make. The footnote must be clarified in the response to consultation - both Zain and Umniah follow the same approach.
12	2.2	Footnote 6: This statement is not clear, as some mobile subscribers do not use data.	Orange wants to clarify the statement regarding mobile subscribers. However, mobile subscriber figures is based on the information provided by the operators. It is equal to the mobile subscribers where all subscribers were providing bundled voice+data services
13	2.2	Total mobile user revenues in 2018 does not appear to be correct given the total number of subscribers in previous table which shows a substantial decrease in dedicated data subscriptions for stand-alone services from 2017 to 2018. The total mobile revenues included in the table do not coincide with the TRC published figures in 28/7/2019. These report that total mobile revenues for 2017 and 2018 were 641 MJoD and 673 MJoD respectively. Additionally, total mobile	Orange asks for a further clarification due to mismatches on data between TRC Annual Report and Consultation Report. The primary source of the market review are operators' data provided to the TRC. The market figures were calculated based on these numbers. We have observed that the definition of revenues is different for the published figures, and its definition during the collection of information for the market review process.

Page	Section	Comment	TRC Responses
		revenues included in the table for 2015 and 2016 do not coincide with the TRC published figures in the annual reports. These report that total mobile revenues for 2015 and 2016 were 609,942,944 JoD and 619,610,165 JoD respectively.	
13	2.2	The apparent increase may be due to the off net bundled minutes that were introduced to the market to break the Zain club effect. The operators' approach of increasing the bundle off net minutes should be assessed by TRC in terms of the impact on operators' revenues. This should lead to the conclusion that there remains a Zain club effect impact on the operators' revenues.	Orange emphasizes the importance of assessing the operators' strategy of increasing the bundle off net minutes in terms of the impact on operators' revenues. This is a point about the way in which the data provided affect the conclusions, not about the underlying data. The revenues are as reported, and we have considered the potential impact of off-net/on-net pricing in our analysis.
15	2.2	The share of call volumes by call type (off-net fixed calls) in this Exhibit shows a decrease. However, this does not coincide with the data in Exhibit II.5 which shows an increase, particularly in 2017.	Orange refers to the divergence between the decreasing trend existing in call type (off-net fixed calls) Exhibit and the increasing trend existing in Exhibit II.5. The table captures the accurate information and trends, which are used to draw analysis and conclusions.
15	2.2	We query how TRC has distinguished trends in post-paid and pre-paid SMS and how it has concluded that both have increased, as the increase is due to bulk commercial SMS.	Orange questions how trends in post-paid and pre-paid SMS have been distinguished. The statement is based on indications from operators. We have attempted to disaggregate data as much as possible, given the information provided by operators, but had to rely on indications where no breakdown was provided.
15	2.2	The last paragraph, states that the data consumption by stand-alone broadband subscriptions in 2018 was 388 million GB, while Exhibit II.8 shows 291 GB for stand-alone and 388GB for standard (handset) subscriptions. This seems to be an inconsistency.	Orange notes an inconsistency between different Exhibits regarding stand-alone broadband subscriptions in 2018. The text uses standard mobile subscription figures to explain trends in dedicated stand-alone broadband subscriptions. Such an error does not affect the conclusion,

Page	Section	Comment	TRC Responses
			since the figures for both are correct.
16	2.2	Footnote 10: This figure does not coincide with the data in Exhibit II.2 which shows a decrease in dedicated data subscriptions for stand-alone services by more than 50% in 2018 compared to 2017.	Orange highlights that the data on Figure and Exhibit do not match. Based on the data provided, for all three operators, there was a decline in subscriptions. However, there was also a substantial increase in GB consumption.
16	2.2	TRC should not conduct analysis given that there is missing data (which TRC should not accept). Analysis conducted on such data is subject to uncertainty and incorrect conclusions may be made. TRC should have reviewed alternative data sources such as Arab Advisors, operators' financial statements, and/or group financial statements.	Orange explains the importance of conducting analysis without missing data. In this case, both Zain and Umniah reported the total data volume, which was used to extract the "Actual usage of Standard Mobile Broadband Subscriptions". Even if the subscribers are not using data, the data are activated and hence this becomes a reasonable assumption to make.
17	2.2	Exhibit II.3 shows that total mobile users revenues is 433,611,035 and that total voice revenues is 175,198,278. This implies that total data revenues is 258,412,757. Is TRC satisfied that these metrics are correct?	Orange asks for correction regarding mobile users' revenues. However, there are also other service revenues, such as SMS revenues.
17	2.2	Foot note 11: There appears no basis for TRC to estimate the figures as Orange Mobile provided the requested data (sub sheet 6 & sub sheet 6b).	Orange notes that there are data provided for Orange Mobile which need to be used for the analysis. However, the numbers used in the table and the analysis are already the ones provided by Orange.
18	2.3	ARPU and market value share are strong indicators of market shares. TRC should have assessed various reports as it is surprising that TRC concludes that in 2015 all three operators held a broadly similar subscriber market share. There have been discussions with TRC on the method adopted by operators for calculating the number of active customers. TRC	Orange notifies the 2019 mobile market share of Zain. However we have considered 2019 data in our analysis.

Page	Section	Comment	TRC Responses
		investigated HLR/VLR systems metrics in 2017-2018 and has the figures that it can build on. The most recent figures on the number of active mobile customers have been published by TRC for Q1/2019 as follows : 3,605,262, 2,462,921, and 2,007,079. These imply that Zain's market share is 44.6%.	
19	2.3	This is incorrect: from 2017 to 2018, the number of subscribers fell from 9,703,287 to 8,731,760, and revenues increased from 355,503,533 to 433,611,035, as per TRC figures (Exhibit II.3 Mobile user revenues (in JD)). Accordingly, the conclusions here are not based on the correct data.	Orange shows the negative relationship between the number of subscribers and revenue gained, and advocates that the conclusions cannot be based on the data. However, based on the data provided by operators, and despite a decrease in the number of subscriptions, it is also evident that there is an increase in revenue, which means that average revenue per subscriber is increasing.
19	2.3	The total mobile revenues included in the table do not coincide with the TRC published figures for 28/7/2019. These show that total mobile revenues for 2017 and 2018 are 641 MJoD and 673 MJoD respectively. Additionally, the total mobile revenues included in the table for 2015 and 2016 do not coincide with the TRC published figures in the annual reports. These show that total mobile revenues for 2015 and 2016 are 609,942,944 JoD and 619,610,165 JoD respectively.	Orange similarly emphasizes the difference between the data from the TRC Annual Report and those in the Consultation Report. The primary source of the market review consultation document were operators' data provided to TRC. The market shares were calculated based on these numbers. We have observed that the revenue definition for the two sources differ, which results in such deviations. There is no impact of this on the conclusions drawn.
19	2.3	TRC should not conduct analysis given that there is missing data (which TRC should not accept). Analysis conducted on such data is subject to uncertainty and incorrect conclusions may be made. TRC should have reviewed alternative data sources such as Arab Advisors, operators' financial statements, and/or group financial statements. Arab Advisor report includes	Orange points out that there is missing information for accurate conclusions. However, there is no missing information or assumption here. Zain reported revenue figures individually for each service, and this was merely added up to obtain the total revenues. In fact, as per Orange's comments, the market share for Zain by revenue is indeed more than 50% in all 3 years. However Zain's revenues

Page	Section	Comment	TRC Responses
		such aggregations. Such reports indicate that Zain has market share of more than 50%.	market share in 2019 has decreased to less than 50%.
19	2.3	We question whether Umniah provides services other than mobile services? TRC should not conduct analysis given that there is missing data (which TRC should not accept). Analysis conducted on such data is subject to uncertainty and incorrect conclusions may be made. TRC should have reviewed alternative data sources such as Arab Advisors, operators' financial statements, and/or group financial statements. Arab Advisor report includes such aggregations.	Orange points out that there is missing information for accurate conclusions. There is no missing information or assumption here. Umniah reported revenue figures individually for each service, and this was merely added up to obtain the total revenues.
20	2.3	TRC should revisit and thoroughly analyse the data it has by type of SMs provided (A2P/bulk SMS and P2P). A disaggregated assessment should be conducted - connected to on-net, off-net and international for each A2P and P2P SMS services. Only then may valid conclusions be made.	Orange offers a new approach for analysis of SMS services to TRC. This is not a point about the accuracy of data, but their interpretation. We have considered these effects in our analysis.
22	2.3	The estimates of Orange Mobile's unitary pricing are incorrect: the method is incorrect, and the estimates are not based on actual figures (as per the footnote on page 22). When Orange Mobile submitted retail revenues and service volumes for 2015, 2016 and 2017, such figures were split between residential and business (sheet 6A and 6B of the Data Collection sheet). The TRC appears to have based its analysis on one of these sheets not both; it is therefore not based on actual data. We request that the TRC clarify the basis on which it reached such conclusion and why it made only partial use of the actual data.	In Orange's view, the estimations' methodology is not correct. However, the methodology is not incorrect for the following reasons: 1. Estimation of Unitary Revenue = Total Domestic Revenues/Total Domestic Voice Minutes 2. Total domestic metrics are obtained by the sum of on-net mobile calls, off-net mobile calls and off-net fixed calls 3. Information provided by Orange on both sheets (business and residential 6A and 6B) was taken into account.
22	2.3	Orange Mobile pre-paid revenue figures for 2015 were provided to TRC.	Orange mentions that Mobile pre-paid revenue figures for 2015 were provided. The information provided by Orange for 2015 has already

Page	Section	Comment	TRC Responses
			been used.
29	3.2	TRC has not considered that the prices of post-paid are much higher than the prices of pre-paid.	Orange demonstrates that TRC has not considered that the prices of post-paid are much higher than the prices of pre-paid. However, we have applied the appropriate market definition methodology that looks at substitution at the margin. Differences in absolute prices are entirely consistent with services being in the same market.
29		TRC says here that in 2017, 92% subscribers had a pre-paid mobile subscription. It is not clear why TRC uses the 2017 figure while the 2018 figure) is available.	2017 was the reference year used for the analysis. 2018 data were collected at a later stage once they became available. Even though 2017 was used as the reference year for calculations, we have considered the 2018 and 2019 figures and their potential impact on our conclusions and assessments.
34	3.2	This is incorrect: stand-alone mobile broadband is not considered in the fixed market review. Mobile broadband has been excluded from all market reviews.	Orange claims that mobile broadband was excluded from all market reviews. However, this claim is wrong. We have considered the substitution between fixed and mobile broadband services in our analysis (see the section in the fixed market consultation titled "Are Mobile broadband services part of the same market as fixed broadband?, p. 58).
36	3.3	This is incorrect, no such obligations (geographic and population rollout obligations on MNOs as part of licensing conditions) in the licensing conditions exist.	Orange claims that there is no such obligation in the licensing conditions. Even without such obligations, the licences are national, so the market is likely to be national on supply side substitution alone.
42	3.3	TRC provides no rationale for the inclusion of fixed line operators in the supply side substitution analysis. Fixed line operators are not relevant to the assessment.	Orange points out that the inclusion of fixed line operators for supply side analysis is irrelevant. This is not a data point but one about analysis – any market definition analysis considers options that are ultimately not found to be part of the market.

Page	Section	Comment	TRC Responses
53	4.4	TRC has not assessed Zain's refusal to implement the obligation to provide MACO in accordance with previous mobile market review regulatory decisions.	Orange refers to a lack of assessment on Zain's refusal on obligation to provide MACO. However, it is not a data point. In our analysis, we have considered the fact that remedies that were imposed have not been complied with.
53	4.4	TRC should explain the meaning of "fairly static market share" and whether it refers to subscribers or revenues. The basis on which TRC reaches this conclusion should be made transparent.	Orange seeks transparency on TRC's conclusion on a "fairly static market share". The explanation is as follows: From 2015 to 2019, all operators have not had major changes in the market share, especially by revenue. 1. Change in market share by revenue is less than 2%, 2. Change in market share by subscriber is less than 7%
53	4.4	TRC should state the reasons underpinning this conclusion. Orange Mobile's experience is that it has requested that Zain provide access to CS/CPS numerous times since 2005 yet Zain has taken no action.	Orange requests the rationale behind of TRC's conclusion. However, it is not a data point – in our analysis, we have considered the fact that past regulatory remedies have not been effective.
54,55	4.4	TRC has provided no evidence in support of its statement, "*Zain's market share is higher than ["NO] when measured by revenue, but not when measured by call volume or subscribers.*"	Orange requests more clarification on Zain's market share. This was calculated based on information provided by Zain.
54,55	4.4	TRC has provided no evidence (e.g. a market study) in support of its statement, "*The TRC notes that the absence of Mobile Number Portability is likely to depress switching between operators, and in a market with a high penetration rate of mobile phones, this will limit movement in market shares.*"	Orange asks for a supportive argument for TRC's statement regarding Mobile Number Portability. The fact that MNP facilitates switching is obvious and well established in other markets, as is the fact that in highly penetrated markets changes in market share can only come from customers switching between operators.
54,55	4.4	"*The TRC notes that retail prices for mobile services in Jordan are competitive, suggesting that competition in the market is functioning well.*" TRC appears to base its perception of effective competition in the retail market measured on pricing in the market. However, TRC appears not to have considered	The point that low prices are an indication of strong competitive pressure should be obvious. Indeed, mobile operators have explicitly asked for the TRC to establish price floors to limit competition that they consider to be ruinous. We have considered these requests and rejected them as inappropriate.

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		that low prices and rising costs put operators' profits under pressure. TRC also appears not to have considered that the rising costs, (e.g. spectrum prices and taxes) are among the highest in the world.	
55	4.4	TRC appears to have considered only part of MVNO services to establish the need to regulate MACO. However, TRC has excluded CS/CPS in its assessment of MACO services.	Orange claims that TRC completed the analysis regardless CS/CPS. MACO would primarily be aimed at enabling MVNOs. We are not aware of CS/CPS being widely used in mobile markets. We have considered the use of calling card services in our analysis.
56	4.4	TRC has conducted only a partial assessment. TRC should provide its analysis of all three elements of the 3CT independent of the failure of any one element. Operators should be given the opportunity to review and appraise all three elements and provide their views. TRC may have reached incorrect conclusions (particularly if data are missing) and operators should be permitted to submit corrections to enable the correct conclusions to be reached.	Orange notified that the assessment was partially conducted. However, this is a consultation exercise, so none of the conclusions are "final". Should it become apparent that the conclusions on one of the criteria needs to be revised, the other criteria would need to be checked.
57	4.4	TRC has not made transparent the evidence that underpin its conclusion. The figures that TRC relied on should be made transparent and subject to stakeholder review in the context of available market reports and facts.	Orange requests the rationale behind TRC's conclusion. The data provided by the operators are the primary source. Also note that Orange (and the other MNOs) have agreed about the market being very competitive.
70	6.2	TRC has not considered the non-implementation of the Decision No.9-1/2004 as one of the major market competition problems which leads to the current situation of high traffic, price war and congestion/quality issues and the pressure on competitors revenues. This is contrary to the statement in its previous mobile market review where TRC stated that it would be considered in this consultation.	Orange points to a contradiction regarding TRC's outputs. It is not a data point. In our analysis, we have considered the fact that obligations have not been implemented or not been enforced.

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80	6.2	TRC does not refer the basis for these calculations for years 2019 and 2020. We consider that these rates represent retail off-net SMS termination not wholesale SMS termination rates as per LRIC model outputs. The data sent previously to the TRC for building the top down TSLRIC model was based on a forecast conducted in 2015 and 2016, whereas the data sent for the purpose of the market review reflects much more accurate forecast based on the recent trend of actual consumption. It is unclear why the SMS termination rates are equal to the retail outgoing SMS to other networks and in turn are equal to wholesale incoming SMS from other networks.	The TSLRIC hybrid model numbers are provided merely to indicate the costs derived for SMS termination. However, the rate for wholesale SMS termination is not final and TRC will issue the new prices for wholesale SMS termination as part of the implementation.